UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2023-1267

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP,

Plaintiffs-Appellees

v.

MYLAN PHARMACEUTICALS, INC. and KINDEVA DRUG DELIVERY L.P.,

Defendants-Appellants

Appeal from the United States District Court for the Northern District of West Virginia case no. 1:22-cv-00035-JPB, Judge John Preston Bailey

ASTRAZENECA'S CORRECTED NON-CONFIDENTIAL OPPOSITION TO MYLAN'S MOTION TO STAY

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UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

CORRECTED CERTIFICATE OF INTEREST

Case Number 2023-1267

Short Case Caption AstraZeneca AB v. Mylan Pharmaceuticals Inc.

Filing Party/Entity AstraZeneca AB; AstraZeneca Pharmaceuticals LP

Instructions: Complete each section of the form. In answering items 2 and 3, be specific as to which represented entities the answers apply; lack of specificity may result in non-compliance. **Please enter only one item per box; attach additional pages as needed and check the relevant box**. Counsel must immediately file an amended Certificate of Interest if information changes. Fed. Cir. R. 47.4(b).

I certify the following information and any attached sheets are accurate and complete to the best of my knowledge.

Date: 1/5/2023

Signature: /s/ David I. Berl

Name: David I. Berl

1. Represented Entities. Fed. Cir. R. 47.4(a)(1).	**2. Real Party in Interest.** Fed. Cir. R. 47.4(a)(2).	**3. Parent Corporations and Stockholders.** Fed. Cir. R. 47.4(a)(3).
Provide the full names of all entities represented by undersigned counsel in this case.	Provide the full names of all real parties in interest for the entities. Do not list the real parties if they are the same as the entities. ☑ None/Not Applicable	Provide the full names of all parent corporations for the entities and all publicly held companies that own 10% or more stock in the entities. ☐ None/Not Applicable
AstraZeneca AB		AstraZeneca PLC
AstraZeneca Pharmaceuticals LP		AstraZeneca PLC

☐ Additional pages attached

4. Legal Representatives. List all law firms, partners, and associates that (a) appeared for the entities in the originating court or agency or (b) are expected to appear in this court for the entities. Do not include those who have already entered an appearance in this court. Fed. Cir. R. 47.4(a)(4).

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☐ None/Not Applicable ☐ Additional pages attached

AstraZeneca AB v. Mylan Pharm. Inc., Case No. 23-1164		

6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6).

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Confidential Material Omitted

The material omitted on page 4 indicates the subject of Defendants-Appellants' confidential regulatory filing.

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STATUTES AND REGULATIONS

Mylan's Motion to Stay turns the principles underlying appellate stays on their head, by allowing Mylan to *upset* the status quo, rather than preserving it, and in so doing irreparably harming *AstraZeneca*.

Mylan is an adjudicated infringer. Its generic version of AstraZeneca's Symbicort® is not on the market. The district court's order *preserves* that status quo. It affords AstraZeneca the 35 U.S.C. § 271(e)(4) relief to which it is entitled, without exception, upon a finding of infringement. That order, moreover, affords AstraZeneca the pediatric exclusivity period associated with the infringed patent, as Mylan itself recognized publicly last month. A stay would permit Mylan to launch its product at the beginning of that period, thereby destroying the status quo irreversibly. All agree that AstraZeneca cannot recover damages for infringement during that period, even if this Court later affirms the district court's judgment. That is a quintessential irreparable harm—to AstraZeneca, not Mylan.

Every prong of Mylan's stay analysis is incorrect. First, Mylan is not likely to succeed. Contrary to Mylan's assertions that the relative timing of patent issuance and ANDA final approval somehow exempt it from the Hatch-Waxman regime, courts *must* order § 271(e)(4) relief when a generic drug infringes an Orange Book-listed patent. This Court and others have confirmed that, contra Mylan's argument, that mandatory relief applies when the infringing generic drug has final approval. *In re Omeprazole Patent Litig.*, 536 F.3d 1361, 1367-68 (Fed. Cir. 2008); *Mylan Labs.,*

Inc. v. Thompson, 389 F.3d 1272, 1281-82 (D.C. Cir. 2004). Mylan's argument that this relief is unavailable here, solely because the patent issued after final approval, and the ANDA therefore lacked a Paragraph IV certification, is unsupported by any authority and defies this Court's prior pronouncements and the conclusions of numerous courts that have addressed the issue. *Vanda Pharm. Inc. v. West-Ward Pharm. Int'l Ltd.*, 887 F.3d 1117, 1128 (Fed. Cir. 2018); *Thompson*, 389 F.3d at 1281-82; *Research Found. v. Mylan Pharm. Inc.*, 2012 WL 1901267, at *4, *7 (D. Del. May 25, 2012); *Cephalon, Inc. v. Sandoz, Inc.*, 2012 WL 682045, at *4-5 (D. Del. Mar. 1, 2012). Even were some affirmative post-issuance act necessary to award Hatch-Waxman relief (it is not), Mylan's theory belies this Court's recognition that post-approval "supplements" (which Mylan disputes give rise to 271(e) relief) and pre-approval "amendments" (which Mylan agrees give rise to 271(e) relief) are the same for purposes of § 271(e). Mylan undisputedly filed two such supplements *after* issuance.

There likewise is no precedent, let alone rhyme or reason in the statutory scheme, for Mylan's contention that AstraZeneca has no pediatric exclusivity. This Court consistently has rejected the proposition on which Mylan's argument rests: that section 355 of the Food Drug and Cosmetic Act limits the circumstances in which relief is available under section 271(e) of the Patent Act. *Ortho-McNeil*

Pharm., Inc. v. Mylan Labs., Inc., 520 F.3d 1358, 1366 (Fed. Cir. 2008); *Vanda*, 887 F.3d at 1139.

Mylan's irreparable harm theory is essentially an unprecedented request to be exempted from the Hatch-Waxman Act itself. Mylan fears that if AstraZeneca obtains the ordered relief, FDA will require Mylan to file a certification that would (in Mylan's view) trigger the pediatric exclusivity it seeks to avoid. But Mylan's suggestion that this Court cannot redress this harm is baseless. Mylan's harm is indistinguishable from the desire of any infringing generic manufacturer to reverse an adverse judgment quickly. For the first time on appeal, Mylan also argues that the district court's relief will preclude Mylan from competing for Medicare and other insurance plan sales, but this argument is both forfeited and flatly mistaken.

AstraZeneca, not Mylan, would be harmed irreparably by a stay—a factor that precludes a stay and that Mylan largely ignores. Even under the unrealistically expedited schedule Mylan proposes (Dkt. 7), this appeal will be resolved after the patent expires, and the pediatric exclusivity period begins, on January 29. If Mylan obtains a stay, Mylan will have no incentive to respect the rights associated with the patent it admittedly infringes, because damages are unrecoverable *even if this Court later affirms the judgment*. The only irreparable harm here is the one the stay would cause. The public interest also favors AstraZeneca; the public benefits from

pediatric testing, which Congress incentivized in a carefully balanced statutory scheme that Mylan seeks to escape.

Mylan's request for a stay should be denied.

I. BACKGROUND

The '558 patent issued on April 26, 2022. Its claims are directed to AstraZeneca's Symbicort®.

Because AstraZeneca conducted successful clinical trials with Symbicort® in asthmatic children, AstraZeneca was awarded 6 months of regulatory exclusivity pursuant to 21 U.S.C. § 355a(b)-(c). Add246. FDA's Orange Book states that the '558 patent has pediatric exclusivity through July 29, 2023. Add139. Last month, Mylan acknowledged publicly that the '558 patent carries pediatric exclusivity relevant to this case "expiring on July 29, 2023." Add250.

Mylan's ANDA No. 211699 covers generic versions of Symbicort® and was approved on March 15, 2022. Mylan has not launched its generic products.

On April 26, 2022, the day the patent issued, AstraZeneca brought this action, asserting that Mylan's ANDA infringed the '558 patent under 35 U.S.C. §§ 271(e)(2) and 271(a). Add263-267.

On May 25, 2022 and June 28, 2022, Mylan submitted Prior Approval Supplements to FDA as part of its ANDA. Add101-110. These supplements revised the ANDA's Regulatory Information and Regulatory Information

Mylan's generic product. Mylan's proposed product cannot be approved or marketed without FDA's approval of those supplements. Add275; 21 C.F.R. § 314.70(b).

Mylan moved to dismiss AstraZeneca's § 271(e)(2) infringement claim, because it filed no "Paragraph IV certification" and "never amended" the ANDA after patent issuance. Add320. Mylan withheld that it submitted, as part of its ANDA, a Prior Approval Supplement to FDA the previous week.

AstraZeneca opposed Mylan's motion on several grounds. First, an infringement claim under § 271(e)(2) does not depend on the ANDA's approval status, Add335-343, and AstraZeneca could obtain relief under § 271(e)(4)(A) through pediatric exclusivity, Add328 (citing *Omeprazole*, 536 F.3d at 1367-68). Second, AstraZeneca argued that "the Court retains equitable power to maintain 'the status quo before infringement,' including to set the effective date of Mylan's ANDA," Add343 (citing *AstraZeneca AB v. Impax Labs., Inc.*, 490 F.Supp.2d 368, 375-76 (S.D.N.Y. 2007)). The district court denied Mylan's Motion to Dismiss. Add346-353.

On October 20, 2022, Mylan moved for partial summary judgment, advancing similar arguments. Add359-377. Mylan again ignored its ANDA's post-issuance Prior Approval Supplements. AstraZeneca opposed, arguing that it could prove

infringement and obtain relief through the period of pediatric exclusivity. Add384-406. The court denied Mylan's motion. Add40-41, 43, 46.

On December 12, 2022, Mylan stipulated that its ANDA infringes the valid '558 patent. Add141-147. Following briefing and argument, on December 16, the court entered an Amended Final Judgment, ordering that (1) pursuant to 35 U.S.C. § 271(e)(4)(A), the effective date of any final ANDA approval shall be no earlier than the '558 patent's expiration date, including any extensions thereof; (2) pursuant to 35 U.S.C. § 271(e)(4)(B), Defendants are enjoined from commercial manufacture, use, offer for sale, sale or importation of the ANDA products until July 29, 2023; (3) pursuant to U.S.C. § 283, Defendants are enjoined from commercial manufacture, use, offer for sale, sale, or importation of the ANDA products until January 29, 2023; and (4) pursuant to the Court's equitable power, the effective date of the final ANDA approval shall be no earlier than July 29, 2023. Add1-3.

The district court later partially stayed, for fourteen days, its Order with respect to (1) the relief awarded under 35 U.S.C. § 271(e)(4)(A) and the Court's general equitable power, and (2) the post-patent-expiration relief pursuant to 35 U.S.C. § 271(e)(4)(B) and § 283. Add167.

II. MYLAN'S EMERGENCY MOTION SHOULD BE DENIED

A stay pending appeal is "extraordinary relief." *Winston-Salem/Forsyth County Bd. of Ed. v. Scott*, 404 U.S. 1221, 1231 (1971). Mylan bears the burden of

showing entitlement to the requested stay according to four equitable factors: "(1) whether the stay applicant has made a strong showing that he is likely to succeed on the merits; (2) whether the applicant will be irreparably injured absent a stay; (3) whether issuance of the stay will substantially injure the other parties interested in the proceeding; and (4) where the public interest lies." *Nken v. Holder*, 556 U.S. 418, 434 (2009). Here, every factor favors denying a stay: Mylan, lacking supportive authority, cannot demonstrate a strong likelihood that the district court separately erred in issuing the three forms of relief that Mylan seeks to stay, and a stay would irreparably harm AstraZeneca, not Mylan.

A. Mylan Is Not Likely To Succeed On Appeal

Mylan cannot come close to the requisite "strong showing that [it is] likely to succeed on the merits." *Id.* at 434. Glaringly, Mylan does not assert a likelihood of overturning the claim construction ruling (Add18-22) and subsequent stipulated order of infringement and validity (Add1). Mylan focuses entirely on the form of relief, *not* the merits.

Further, because the district court granted AstraZeneca relief independently under §§ 271(e)(4)(A), 271(e)(4)(B), and its equitable authority, Mylan must demonstrate likelihood of success as to *each* form of relief. Mylan cannot do so: the Order places Mylan in the same position as an ANDA filer that respected the

'558 patent, and Mylan offers no basis for rewarding its choice to infringe by nullifying AstraZeneca's pediatric exclusivity.

1. The District Court Correctly Issued Relief Under § 271(e)

Mylan argues, without a shred of supportive authority, that AstraZeneca cannot state an infringement claim under § 271(e)(2) because the patent issued after ANDA approval. Mot. 10-13. This Court's precedent forecloses Mylan's argument. Where "FDA *has already approved the ANDA*," § 271(e) claims remain viable and operate to "alter the effective date of the application" to the date of patent expiration or applicable extension such as "pediatric exclusivity." *Omeprazole*, 536 F.3d at 1367-68 (emphasis added); *Ortho-McNeil,* 520 F.3d at 1366) (after ANDA approval, "[t]he district court was correct to reset the effective date" "directly under [§ 271]"); *Thompson*, 389 F.3d at 1281-82 (same). Indeed, Mylan previously recognized that "an order postponing approval under § 271(e)(4)(A)" was appropriate in these cases after "the FDA approved the ANDAs." Add376. Where, as here, a court indisputably may *issue* prospective relief under § 271(e) after approval, a § 271(e) case *can be filed* after FDA approval, as the district court properly held. Mylan's argument that 271(e) somehow provides a post-approval remedy (resetting the ANDA's effective date and injunction) but no ability to seek such remedy (Add375-376) traduces this Court's authority foreclosing Mylan's effort to extinguish AstraZeneca's claim.

Despite the precedent confirming the availability of post-approval remedies, Mylan argues that no claim exists because its "application" was "submitted" before patent issuance. Mot. 10-11. However, the "application" submitted in § 271(e) is not limited to the static document initially filed, but includes subsequent ANDA filings. *Vanda*, 887 F.3d at 1127-28. Mylan indisputably made two such filings—ANDA supplements, *see* 21 C.F.R. § 314.3(b)—that require FDA approval, Add275, and thus constitute acts of § 271(e) infringement.

1. Mylan acknowledges correctly that subsequent ANDA submissions are infringing acts under § 271(e)(2), but then arbitrarily restricts infringing acts to initially submitting an ANDA and submitting ANDA amendments. Mot. 11-12. But ANDA filers may also file ANDA "supplement[s]" after approval. Mot. 12 (citing 21 C.F.R. § 314.97). Those are no different—"an ANDA includes 'all amendments and supplements to the application.'" *Guilbeau v. Pfizer Inc.*, 880 F.3d 304, 316 n.9 (7th Cir. 2018) (quoting 21 C.F.R. § 314.3(b)). Mylan undisputedly submitted two supplements after patent issuance (Mot. 12, Add101-110), "cognizable acts of infringement" under § 271(e)(2), as the district court correctly held. Add45-46; *Vanda*, 887 F.3d at 1128.

Mylan's argument that infringement under § 271(e)(2) is limited to the initial ANDA filing and amendments thereto is atextual. Section 271(e)(2) refers to an "application," which Mylan concedes includes amendments. Mot. 12. ANDA

supplements are, by definition, part of the ANDA just as amendments are. 21 C.F.R. § 314.3(b). Though Mylan cites *Vanda* to support its baseless distinction between ANDA amendments and supplements, Mot. 12, *Vanda*'s actual language (not acknowledged by Mylan) refutes any such distinction, explaining that Congress did not "exclude amendments *and supplements* to the ANDA as cognizable acts of infringement." 887 F.3d at 1128 (emphasis added). *Vanda* further explained that where Congress sought to exclude supplements it did so expressly, amending the statute to provide that the thirty-month stay could be granted only where a patent issued and was submitted to FDA "before the date on which the [ANDA] *application (excluding an amendment or supplement to the application)*" "was submitted." *Id.* (quoting 117 Stat. at 2449). That Congress elected not to "exclude amendments and supplements" from the acts of § 271(e)(2) infringement confirms that both acts fall within that provision. *Id.* Fatal to Mylan's approach, this Court in *Vanda* squarely refused to read into § 271(e) unrecited exceptions regarding timing and the application status upon patent issuance.

Omitting the contrary analysis above, Mylan suggests that *Vanda* somehow excluded supplements from § 271(e)(2) *sub silentio*. Mot. 12; 887 F.3d at 1128. *Vanda*'s statement that an ANDA filer is "subject to a § 271(e)(2)(A) infringement claim on a patent that issues after the filing of the ANDA, but before FDA approval," simply addressed the facts before it. *Id.* at 1127. Although the ANDA filer in *Vanda*

did submit an amendment including a Paragraph IV certification "on a patent that issue[d] after the filing of the ANDA, but before FDA approval," *Vanda* did not suggest, let alone hold, that patent issuance "before FDA approval" was a requirement. Here, Mylan submitted a post-patent-issuance supplement rather than an amendment, but *Vanda*'s discussion above confirms that amendments and supplements should be treated consistently and thus, were any post-patent issuance filing required (it is not, as explained *infra*), *either* can infringe under § 271(e)(2).

Importantly, Mylan filed "Prior Approval Supplement[s]," Add101-110, which has a specific meaning within the Hatch-Waxman framework. A "Prior Approval Supplement" designates a "major change" that "requires the submission of a supplement and approval by FDA prior to distribution of the drug product made using the change." Add275; *In re Darvocet Prod. Liability Litig.*, 756 F.3d 917, 923 (6th Cir. 2014). That is, in its "Prior Approval Supplements" that are perforce part of its ANDA, Mylan seeks FDA approval to engage in conduct relating to its ANDA product that, absent approval in response to the supplement, is not permitted. Mylan's supplements thus fall squarely within the letter of § 271(e)(2): they are part of the "application," (31 C.F.R. § 314.3(b)), and they are made for "the purpose" "to obtain approval under such Act to engage in the commercial manufacture, use, or sale of a drug" claimed in a patent "before the expiration of such patent," Add275. Nothing more is required to constitute an act of infringement under the statute, even

under Mylan's cramped reading that requires an appropriate regulatory filing after the patent issues.

Simply put, nothing in section 271(e) depends on the ANDA's approval status. As multiple circuit courts—including this one—have held, an approved ANDA that infringes an Orange Book-listed patent must be treated "the same as that of other ANDAs blocked from final approval by patent or exclusivity rights." *Thompson,* 389 F.3d at 1282; *Omeprazole*, 536 F.3d at 1367-68 (resetting approval of finally approved ANDA to date following expiration of pediatric exclusivity).

2. Consistent with this authority and the language of § 271(e), district courts correctly have held that a post-issuance regulatory filing was not required to infringe under § 271(e). In *Research Foundation*, the court enforced a claim, under § 271(e)(2), asserting a patent that issued after ANDA approval and any relevant regulatory filing. 2012 WL 1901267, at *4 ("§ 271(e)(2) directs [the] analysis to the scope of approval sought in the ANDA," not the presence of a Paragraph IV certification or the nonexistence of FDA approval (citing *AstraZeneca Pharm. LP v. Apotex Corp.*, 669 F.3d 1370, 1379 (Fed. Cir. 2012))). Similarly, in *Cephalon*, the patents "issued after [the generic] filed its ANDA," and the generic never submitted a Paragraph IV certification, but the court nonetheless upheld a claim under § 271(e)(2). 2012 WL 682045, at *4-5. The reasoning of *Research Foundation* and *Cephalon* accords with this Court's consistent recognition that § 271(e) relief

persists after an ANDA approval; Mylan's alternative approach "elevate[s] form over substance" and should be rejected. *Id.* at *5.

2. The District Court Correctly Issued Relief Through Pediatric Exclusivity

Mylan's argument that AstraZeneca is not entitled to relief through pediatric exclusivity (Mot. 17-18) ignores this Court's repeated holdings that § 271(e)(4)(A) relief extends through patent expiry along with associated pediatric exclusivity. *Omeprazole*, 536 F.3d at 1368 (rejecting argument that "section 271(e)(4)(A) provides no remedy after patent expiration"); *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1341 (Fed. Cir. 2015) (same). These precedents foreclose Mylan's ability to show a strong likelihood of prevailing now.

Strikingly—given its insistence that it is not only likely to prevail but entitled to the extraordinary relief of a stay—Mylan has not cited even one case, from any court, in which a patentee was awarded pediatric exclusivity and prevailed in showing infringement under section 271(e), yet was not awarded § 271(e)(4)(a) relief resetting the date of ANDA approval until after pediatric exclusivity. Untethered to any precedent, Mylan argues that 21 U.S.C. § 355a provides an exclusive set of conditions for pediatric exclusivity, including submitting a Paragraph II, III, or IV certification, that limits relief under § 271(e). Mot. 17-18. As support, Mylan over-reads *Omeprazole*'s observation that 21 U.S.C. § 355a "address[es] situations in which a Paragraph IV certification is submitted," 536 F.3d

at 1368; *Omeprazole* did not suggest or hold, contrary to the language of § 355a, that a certification was a prerequisite for § 271(e) relief to extend through pediatric exclusivity.

Unsurprisingly, this Court has rejected virtually identical arguments that the absence of a circumstance recited in 21 U.S.C. § 355, such as a Paragraph IV certification, precludes relief under 35 U.S.C. § 271(e). In *Ortho*, Mylan similarly argued that by "lay[ing] out two measures for delaying an ANDA's approval," § 355 forecloses that relief under 35 U.S.C. § 271(e) unless one of those two measures is present. 520 F.3d at 1366. This Court rejected that argument, explaining that "the provisions [of § 355] *do not limit the authority of the district court* to reset the effective date in circumstances similar to those statutorily listed." *Id.* (emphasis added). Citing *Ortho*, *Vanda* likewise concluded that "[t]he district court's authority to grant the remedies provided in [§ 271(e)(4)] following a judgment of patent infringement under § 271(e)(2) is not limited to those circumstances expressly listed in [§ 355(j)(5)(B)(iii)]." 887 F.3d at 1139. The Court here should reject Mylan's identical effort to mis-interpret the scope of § 271(e) relief to be limited by the certifications recited in 21 U.S.C. § 355a.

In accordance with *Omeprazole* and this Court's subsequent authority, district courts invariably award § 271(e)(4) relief through pediatric exclusivity upon a showing of infringement. *See, e.g.*, *Impax*, 490 F.Supp.2d at 378, *aff'd*, 536 F.3d

1361 (Fed. Cir. 2008); *Wyeth v. Teva Pharm. USA Inc.*, 2010 WL 3211126, at *3-4 (D.N.J. Aug. 13, 2010). Against this weight of authority, Mylan cites nothing. Its facile reading of the Hatch-Waxman statutes is not only senseless and plainly incorrect, but is wholly novel and unsupported by any authority. That comes nowhere close to the requisite "strong" likelihood of success to justify Mylan's stay that would allow it to market during the pediatric exclusivity period that AstraZeneca earned and FDA conferred.

3. The District Court Correctly Issued Relief Under Its Equitable Power.

Even could Mylan show error in the relief under § 271(e)(4)(A)—and it cannot—the further relief was well-supported by precedent and independently mandates denial of Mylan's requested stay.

The district court correctly exercised its equitable power to grant AstraZeneca the same relief set forth in § 271(e)(4)(A). This Court affirmed that same relief in *Vanda*, 887 F.3d at 1138-39, contravening Mylan's argument that this relief is unavailable. That relief also was ordered in *AstraZeneca v. Impax*, where the court explained, "delaying the effective date would require [the generic] to wait until the expiration of Astra's six-month period of pediatric exclusivity," and "would put the parties in the position they would have been in had the act of infringement never occurred," by subjecting the generic to pediatric exclusivity. 490 F.Supp.2d at 375-76. Accordingly, the court concluded that the patentee was "entitled to judicial

relief" "*either* under the Court's equitable power *or* [§ 271(e)(4)(A)]." *Id.* at 375 (emphases added). This Court affirmed, without disturbing the equitable relief it addressed and affirmed years later in *Vanda*. *Omeprazole*, 536 F.3d at 1367.

The district court simply followed this well-worn path. Mylan is unlikely to succeed in reversing the district court's application of equitable discretion. Mylan argues that the district court unlawfully "craft[ed its] own additional" remedy proscribed by statute. Mot. 16. Not so. The court simply ordered the same relief (not a new remedy) under its equitable power that § 271(e)(4)(A) ordinarily affords to a prevailing patentee. Thus, even if § 271(e)(4)(A) relief did somehow incorporate provisions of 21 U.S.C. § 355a to require a certification (it does not, *supra* II.A.2), the district court had the power to order such relief equitably.

4. The District Court Correctly Issued Relief Under § 271(e)(4)(B).

Mylan also must establish a likelihood of reversing the injunction under § 271(e)(4)(B) to justify a stay. Mylan, an adjudicated section 271(e) infringer, is subject to the remedies set forth in that section, through patent expiry plus pediatric exclusivity. The court's order under § 271(e)(4)(B) was supported by the statutory framework as courts have applied it. *Amgen Inc. v. Sandoz Inc.*, 2021 WL 5367054, at *2 (D.N.J. Oct. 12, 2021) (ordering injunction through patent expiration, "including any extensions or additional periods of exclusivity (including pediatric

exclusivity)"); *Janssen Prods., L.P. v. Lupin Ltd.*, 109 F.Supp.3d 650, 708 (D.N.J. 2014) (same).

Contra Mylan, *AstraZeneca v. Apotex* does not dictate otherwise. Mot. 15 (citing 782 F.3d at 1342). The Court there held only that damages were unavailable during pediatric exclusivity. 782 F.3d at 1345. The district court here did not award money damages. Rather, AstraZeneca sought an injunction during the pediatric exclusivity period according to the equitable factors, Add134-136, which Mylan ignored entirely. *See* Add421-423. The district court discretionarily ordered an injunction under § 271(e)(4)(B) in view of AstraZeneca's showing. Mylan has no basis to stay that relief.

B. A Stay Would Irreparably Harm AstraZeneca, not Mylan

Mylan's motion independently fails because it pays only the barest lip service to a required stay factor—"whether issuance of the stay will substantially injure the other parties interested in the proceeding." *Nken*, 556 U.S. at 434. That factor overwhelmingly favors denial. Here, Mylan repeatedly has threatened to launch at risk since its ANDA was approved in March 2022. A stay of the Order would permit Mylan to launch its product near the *beginning* of the contested pediatric exclusivity period. Add139. If this Court affirms the district court's judgment, AstraZeneca cannot recover damages for Mylan's infringing sales during pediatric exclusivity. *AstraZeneca*, 782 F.3d at 1344-45. The stay thereby will have irreparably nullified

AstraZeneca's regulatory exclusivity, even if this Court affirms that AstraZeneca is entitled to exclusivity, *or* if the Court agrees with AstraZeneca in appeal No. 23-1164 regarding U.S. Patent No. 10,166,247 (where the parties agree that reversal would prevent Mylan's approval through pediatric exclusivity, Add375). If Mylan obtains the requested stay, it could infringe with impunity; it will be rewarded, and AstraZeneca will be harmed irreparably, unnecessarily, and unfairly, if this Court affirms even one of the multiple challenged forms of relief.

Mylan's stay would not "preserve the *status quo*." Mot. 22. The "status quo" is that Mylan—an adjudicated infringer that contests neither an injunction through January 2023 nor infringement nor validity—is *not* on the market. Rather than preserve that status quo, as stays ubiquitously are intended, *Nken*, 556 U.S. at 429, Mylan's proposed stay would alter the market and status quo, irretrievably. The stay Mylan seeks is unprecedented for that reason as well.

Mylan's sole response is to declare nonsensically that an injury of generic competition that AstraZeneca's management anticipated is not really an injury at all: it points to an investor call in which AstraZeneca indicated—before the district court's decision—that it had "digested the patent loss of Symbicort." Mot. 22; Add233. According to Mylan, this "cast[s] doubt on any claims that the sky will fall" if a stay is granted. Mot. 22. That AstraZeneca can weather a loss does not somehow make accelerating that loss any less irreparable; Mylan's argument is

simply nonresponsive to the critical question of whether a stay will cause harm that cannot be compensated monetarily. Once AstraZeneca's "statutory entitlement has been lost, it cannot be recaptured." *Apotex, Inc. v. FDA*, 2006 WL 1030151, at *17 (D.D.C. Apr. 19, 2006) (citing *Mova Pharm. Corp. v. Shalala*, 140 F.3d 1060, 1066 n.6 (D.C. Cir. 1998)). Undisputably, such harm is irreparable.

This harm, too, is more than speculative. Even under Mylan's proposed schedule, this case will not be decided until after January 29, 2023, providing Mylan the opportunity to launch during pediatric exclusivity with a stay. Mylan's citation, Mot. 22, to *Novartis Pharm. Corp. v. Accord Healthcare Inc.*, No. 21-1070 (Fed. Cir. Mar. 4, 2021), Dkt. 21, is thus inapposite; unlike that case, Mylan seeks here to *vacate* all relief protecting AstraZeneca, as of January 29, long before the appeal concludes, Mot. 19.

Mylan hopes to secure through extraordinary relief what it could not win on the merits in the district court: the unfettered right to market a generic product during pediatric exclusivity, when AstraZeneca cannot obtain damages even if it prevailed in the appeal. *AstraZeneca*, 782 F.3d at 1344-45. Such a stay would be both unprecedented and profoundly unfair.

C. The Supposed Irreparable Harm to Mylan Is Illusory

Mylan also argues that without a stay, "FDA would change Mylan's *final* approval status to *tentative* approval," and "Mylan would then be required to submit,

for the first time, a certification" under 21 U.S.C. § 355(j)(2)(A)(vii), which in turn would give AstraZeneca the period of pediatric exclusivity that Mylan argues it is entitled to avoid. Mot. 18-19. That FDA undisputedly is required by statute to respect AstraZeneca's pediatric exclusivity is not an irreparable harm; it confirms that Mylan's statutory interpretation that permits it to avoid this exclusivity makes no sense. *See supra* II.A.1-2.

Unsurprisingly, Mylan points to no authority for the proposition that an irreparable harm can arise because of the regulatory consequences that flow from a district court doing what the statute requires. Under § 271(e)(4)(A), upon entry of judgment, "the court *shall order* the effective date of any approval of the drug" to be "not earlier than the date of the expiration of the patent which has been infringed." The district court did so. Mylan makes the unprecedented argument that this mandatory command should be stayed pending appeal because of its statutory consequences. That is not a harm; that is the statutory scheme working as intended, to keep Mylan's infringing product off the market until the statute entitles Mylan to sell it.

Even more damningly, Mylan never substantiates the premise underlying its claim of "irreparable" harm: that this Court is powerless to undo those harms if it ultimately agrees with Mylan that the district court erred. According to Mylan, even if this Court reverses the judgment, Mylan cannot regain final approval until it can

"clear the FDA regulatory review process to obtain final approval a second time." Mot 19. The only citation supporting this premise is the declaration of Mylan's own employee. *Id.* (citing Add52). The self-serving statements of S. Wayne Talton, Mylan's "Head of Regulatory North America and Head of Regulatory CMC and Generic Strategy," of course, are not authority regarding this Court's power to right the district court's putative wrongs.

Mylan's declarant testimony and related irreparable harm arguments should separately be disregarded because Mylan forfeited its opportunity to present factual testimony on the equitable factors. Mylan declined to dispute irreparable harm even though it was squarely at issue below with respect to AstraZeneca's entitlement to relief under § 271(e)(4)(B). Instead, Mylan unveiled this testimony in an emergency motion on appeal, and then declined AstraZeneca's request to test its veracity by cross-examination. Add431. Because Mylan failed to present its declarant testimony regarding irreparable harm to the district court (where it would have been subject to cross-examination), Mylan forfeited it and the related arguments upon which it now relies. *In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020).

Nonetheless, if the Court considers new testimony, Mylan is wrong that its generic would not be covered by insurance until 2024 or 2025. *See* Mot. 19–20. *First*, Mylan does not need to negotiate with insurers or Medicare for formulary

access. Add450-453 (¶¶27-32). As an AB-rated generic, Mylan's ANDA product would be automatically substituted for Symbicort by pharmacists at the point of sale. Add452-453 (¶31). *Second*, the process by which commercial insurers update their formularies is far more fluid than Mylan represents. Commercial insurers regularly update their formularies throughout the year. Add454-456 (¶¶33-35). *Third*, there are no restrictions on when new drugs may be added to a Medicare Part D plan. Add450-452 (¶¶27-29). Medicare regulations expressly allow plans to add new drugs "at any time during the year." Add450-451 (¶27). Medicare also permits plans to replace a brand drug with a generic "immediately" upon launch, without requiring prior approval. Add450-451 (¶¶27-28). Consequently, generics can—and regularly do—launch throughout the year, not just during narrow windows, as Mylan suggests. Add455-456 (¶¶34-35).

Mylan's "irreparable" harm claim is simply a complaint that the appellate process takes time, that FDA will not act instantly upon mandate issuance, and that launching its product will take Mylan more time. Mot. 19-21. By Mylan's logic, any time a generic pharmaceutical manufacturer is enjoined by an erroneous district court judgment that this Court corrects, the harm is irreparable. There is no authority for that startling proposition, and it cannot support the extraordinary remedy of a stay.

D. The Public Interest Favors Enforcing Pediatric Exclusivity

The "public interest nearly always weighs in favor of protecting property rights" when "the patentee practices his inventions." *Apple v. Samsung*, 809 F.3d 633, 647 (Fed. Cir. 2015). And there is a "significant public interest in encouraging investment in drug development and protecting the exclusionary rights conveyed in valid pharmaceutical patents." *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1384 (Fed. Cir. 2006). Congress addressed directly the public interest relevant here, creating pediatric exclusivity to incentivize innovators like AstraZeneca to perform pediatric studies. *AstraZeneca*, 782 F.3d at 1341. A stay pending appeal would permit Mylan—an uncontested infringer of a valid patent—to nullify AstraZeneca's pediatric exclusivity through a stay during this appeal. That would, anomalously, advantage Mylan over a party that respected AstraZeneca's patent rights by filing a Paragraph II or III certification, which would defer approval through pediatric exclusivity.

CONCLUSION

Mylan's emergency motion for a stay pending appeal should be denied.

JANUARY 5, 2023

Respectfully submitted,

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ADDENDUM

TABLE OF CONTENTS

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
AT WHEELING

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP, Plaintiffs, v. MYLAN PHARMACEUTICALS INC. and KINDEVA DRUG DELIVERY L.P., Defendants.	Civil Action No. 1:22-cv-35 (Bailey)

STIPULATED PROTECTIVE ORDER

Plaintiffs AstraZeneca AB and AstraZeneca Pharmaceuticals LP (collectively, "Plaintiffs"), and Defendants Mylan Pharmaceuticals Inc. ("Mylan") and Kindeva Drug Delivery L.P. ("Kindeva") (collectively, "Defendants"), (collectively with the Plaintiffs, "the Parties") hereby stipulate to the entry of thefollowing protective order in the above-captioned matter (the "Action"):

1. PURPOSES AND LIMITATIONS

Disclosure and discovery activity in the Action is likely to involve production of confidential, proprietary, or private information for which special protection from public disclosure and from use for any purpose other than prosecuting and defending the Action may be warranted. Accordingly, the Parties hereby stipulate to, and request that the Court enter, the following Stipulated Protective Order (the "Order").

The Parties acknowledge that this Order does not confer blanket protections on all disclosures or responses to discovery and the protection it affords from public disclosure,

and use extends only to the information or items that are entitled to confidential treatment under applicable law.

The Parties acknowledge that this Order does not confer blanket protections on all disclosures or responses to discovery and the protection it affords from public disclosure, and use extends only to the information or items that are entitled to confidential treatment under applicable law.

2. DEFINITIONS

Words shall have their normally accepted meanings as employed in this Order. The word "shall" is mandatory. The words "includes" and "including" are not limiting. The singular shall include the plural and vice versa. Additionally, the following terms shall have the listed definitions:

2.1. Challenging Party: a Party that challenges the designation of information or items under this Order.

2.2. "CONFIDENTIAL" Information or Items: information (regardless of how it is generated, stored, or maintained) or tangible things that contain confidential and non-public technical, operational, or commercial information or non-public personal information or any other information for which a good faith claim of need for protection from disclosure can be made under the Federal Rules of Civil Procedure or other applicable law.

2.3. Counsel: Outside Counsel of Record and In-House Counsel (as well as their support staff).

2.4. Designating Party: a Party or Non-Party that designates information or items that it produces in disclosures or in responses to discovery as "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL."

2.5. Disclosure or Discovery Material: all items or information, regardless of the medium or manner in which they are generated, stored, or maintained (including, among other things, testimony, transcripts, and tangible things), that are produced or generated in disclosuresor responses to discovery in the Action.

2.6. Document: As used herein, the term "Document" shall have the meaning set forthin Rule 34 of the Federal Rules of Civil Procedure.

2.7. Expert: a person with specialized knowledge or experience in a matter pertinent to the Action who has been retained by a Party or its Counsel to serve as an expert witness or consultant in the Action.

2.8. In-House Counsel: any attorney who is an employee of a Party and has responsibility relating to the litigation in these Action. In-House Counsel does not include Outside Counsel of Record.

2.9. "HIGHLY CONFIDENTIAL" Information or Items: sensitive "CONFIDENTIAL" Information or Items (regardless of how it is generated, stored, or maintained) or tangible things that contain or otherwise reference non-public information including but not limited to trade secrets, unpublished pending patent applications, competitive financial, regulatory, and strategic information, highly sensitive production, marketing, sales, or other propriety data or information of commercial value, the disclosure of which to another Party or Non-Party could cause a competitive disadvantage to a Producing Party or could create a substantial risk of serious harm that could not be avoided by less restrictive means. "HIGHLY CONFIDENTIAL" Information or Items, to the extent it meets the aforementioned definition, may include non-public regulatory filings and correspondence, strategic planning information, information related to products not

commercially launched or in development, manufacturing processes and specifications, testing procedures, suppliers and/or vendors, specific product compositions, regulatory information (such as confidential FDA filings or correspondence relating to INDs, NDAs and ANDAs), submissions to the United States Pharmacopeia and other confidential regulatory materials, research and development information (such as lab notebooks, reports, experimental data, memoranda, presentations, meeting minutes, and study protocols), and financial information (such as pricing, cost data, and analyses).

2.10. Non-Party: any natural person, partnership, corporation, association, or other legal entity not named as a Party in these Action.

2.11. Outside Counsel of Record: attorneys who are not employees of a Party to in these Action but are retained to represent or advise a Party to the Action and have appeared in the Action on behalf of that Party or are employed by a law firm which has appeared on behalf of that Party.

2.12. Party: any party to these Action.

2.13. Producing Party: a Party or Non-Party that produces Disclosure or Discovery Material in the Action.

2.14. Professional Vendors: persons or entities that provide litigation support services (*e.g.*, photocopying, videotaping, translating, preparing exhibits or demonstrations, and organizing, storing, or retrieving data in any form or medium) and their employees and subcontractors.

2.15. Protected Material: any Disclosure or Discovery Material that is designated as "CONFIDENTIAL," or as "HIGHLY CONFIDENTIAL."

2.16. Receiving Party: a Party that receives Disclosure or Discovery Material from a

Producing Party.

3. **SCOPE**

The protections conferred by this Order cover Protected Material produced in discovery in the Action as well as (a) any information copied or extracted from Protected Material; (b) all copies, excerpts, summaries, or compilations of Protected Material; and (c) any testimony, conversations, or presentations by Parties or their Counsel that might reveal Protected Material.

However, the protections conferred by this Order do not cover the following information:

a) any information that is in the public domain at the time of disclosure to a Receiving Party or becomes part of the public domain after its disclosure to a Receiving Party as a result of publication not involving a violation of this Order; and

b) any information obtained by the Receiving Party from a source who obtained the information lawfully and under no obligation of confidentiality to the Designating Party.

4. **DURATION**

Even after Final Disposition of the Action, the confidentiality obligations imposed by this Order shall remain in effect until a Designating Party agrees otherwise in writing or a court order otherwise directs. "Final Disposition" shall be deemed to be the later of (1) dismissal of all claims and defenses in the Action, with or without prejudice; and (2) final judgment herein after the completion and exhaustion of all appeals, rehearings, remands, trials, or reviews of the Action, including the time limits for filing any motions or applications for extension of time pursuant to applicable law. This Court will retain jurisdiction to enforce the terms of this Order following the Final Disposition of the Action.

The parties agree not to challenge the enforceability of this Protective Order on thegrounds that it is not limited in duration.

5. DESIGNATING PROTECTED MATERIAL

5.1. Exercise of Care in Designating Material for Protection. Each Party or Non-Partythat designates information or items for protection under this Order must take reasonable care to limit any such designation to specific material that qualifies for protection under this Order.

5.2. Manner and Timing of Designations. Except as otherwise provided in this Order or as otherwise stipulated or ordered, Disclosure or Discovery Material that qualifies for protection under this Order must be clearly so designated before the material is disclosed or produced. Designation in conformity with this Order requires:

a) **for information in documentary form** (*e.g.*, paper or electronic documents, but excluding transcripts of depositions or other pretrial proceedings), that the Producing Party affix the legend "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" to each page that contains Protected Material or, in the case of native file production, by appending to each native file production file name the designation "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL," or otherwise designating such production in a manner agreed to by the Parties in writing.

A Party or Non-Party that makes original documents or materials available for inspection need not designate them for protection until after the inspecting Party has indicated which material it would like copied and produced. During the inspection and before the designation, allof the material made available for inspection shall be deemed "HIGHLY CONFIDENTIAL." After the inspecting Party has identified the documents

it wants copied and produced, the Producing Party must determine which documents, or pages thereof, qualify for protection under this Order. Then, before producing the specified documents, the Producing Party must affix the appropriate legend ("CONFIDENTIAL" or "HIGHLY CONFIDENTIAL") to each document orpage of a document that contains Protected Material.

b) **for testimony given in deposition or in other pretrial proceedings**, that deposition testimony or testimony during other pretrial proceedings shall be treated as "HIGHLY CONFIDENTIAL" for a period of twenty-one (21) calendar days from the date of receipt by Outside Counsel of Record of a final transcript during which a Designating Party may identify the specific portions of testimony as to which protection, "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL," is sought and specify the particular level of protection being asserted. At theexpiration of that 21-day period, only those portions that are specifically identified as either "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" will qualify for protection under this Order. Alternatively, during that 21-day period, a Designating Party may, if appropriate and in good faith (*e.g.*, where a substantial portion of the overall testimony concerns confidential material, making specific designations burdensome), designate the entire transcript as "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL."

Any rough transcript that is generated before receipt by Outside Counsel of Record of a final transcript shall be treated, until the expiration of the 21-day period after Outside Counsel of Record receives the final transcript, as "HIGHLY CONFIDENTIAL" in its entirety unless otherwise agreed. Upon the expiration of the 21-day period after receipt of the final transcript, only those portions of the rough

transcript corresponding to the final transcript that are timely designated as either "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" shall be so designated in the rough transcript, unless otherwise agreed to by the Parties.

The use of a document as an exhibit at a deposition shall not in any way affect its designation as "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL."

c) **for information produced in some form other than documentary form and for any other tangible items**, that the Producing Party affix in a prominent place on the exterior of the container or containers in which the information or item is stored the legend "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL." If only a portion or portions of the information or item warrant protection, the Producing Party, to the extent practicable, shall identify the protected portion(s) and specify the level of protection being asserted.

5.3. Inadvertent Failures to Designate. The inadvertent disclosure or production of any information, document, or tangible item without the designation of this Order shall not constitute a waiver of any claim of confidentiality. Where such undesignated disclosure or production resulted from inadvertence or mistake on the part of the Producing Party, such inadvertence or mistake shall be brought to the attention of the Receiving Party promptly after its discovery. Within ten (10) calendar days of the notice of such inadvertent or mistaken undesignated disclosure or production, the Producing Party shall provide properly designated documents or tangible items, if applicable. Upon receipt of such notice and properly designated documents or tangible items, if applicable, the Receiving Party shall substitute properly designated copies for those previously received, destroy the previously received copies, and treat the information contained in or derived from said replaced documents or tangible items as Protected Material.

6. CHALLENGING CONFIDENTIALITY DESIGNATIONS

6.1. Timing of Challenges. If a Receiving Party in good faith believes that information should not be designated as Protected Material, it must challenge a designation of confidentiality within a reasonable period of time after such designation is made by the Designating Party. A reasonable period of time shall take into account all circumstances including the timing of production, as well as the scope and volume of production.

6.2. Meet and Confer. In the event of a challenge to a designation, the Challenging Party shall initiate the dispute resolution process by providing written notice of each designation it is challenging and describing the basis for each challenge. To avoid ambiguity as to whether a challenge has been made, the written notice must recite that the challenge to confidentiality is being made in accordance with this specific section of the Order.

The Parties shall attempt to resolve each challenge in good faith and must begin the process by conferring directly (in person or by telephone) within three (3) business days of the written notice. In conferring, the Challenging Party must explain the basis for its belief that the confidentiality designation was not proper. If the Parties do not reach agreement, the Challenging Party must initiate motion practice or another appropriate dispute resolution mechanism with the court seeking to change or remove the designation within ten (10) business days of the first written notice, after which any objections to the designation are waived. Until the Court rules, the confidentiality designation shall remain in effect. If challenged, the Designating Party shall have the burden of proving that the material it designated is properly designated as Protected Material under this order.

7. ACCESS TO AND USE OF PROTECTED MATERIAL

7.1. Basic Principles. A Receiving Party may use Protected Material that is disclosedor produced by another Party or by a Non-Party in connection with these Action only.

Protected Material may be disclosed only to the categories of persons and under the conditions described in this Order or as otherwise agreed to by the parties. When the Action have been terminated, a Receiving Party must comply with the provisions of Section 4 above andSection 14, below.

Protected Material must be stored and maintained by a Receiving Party at a location and in a secure manner that ensures that access is limited to the persons authorized under this Order.

Protected Material disclosed or produced by one Party may not be disclosed to anotherParty, unless otherwise agreed.

Documents and things produced or made available for inspection may be redacted, in good faith by the Producing Party, to the extent they contain information that is not relevant to any Party's claim or defense, pursuant to Fed. R. Civ. P. 26(b)(l), or that is subject to the attorney-client privilege, to work-product immunity, or any other applicable privilege or immunity. Each such redaction, regardless of size, shall be clearly labeled "Redacted" or the like,as appropriate. This Paragraph shall not be construed as a waiver of any Party's right to seek disclosure of redacted information.

7.2. Access to "CONFIDENTIAL" Information or Items. Unless otherwise ordered bythe Court or permitted in writing by the Designating Party, access to information or items designated "CONFIDENTIAL" shall be limited to:

a) Outside Counsel of Record of the Receiving Party, as well as employees of said Outside Counsel of Record to whom it is reasonably necessary to disclose the information for purposes of the Action;

b) Up to three (3) In-House Counsel of the Receiving Party as well as support staff of-In-House Counsel of the Receiving Party (*e.g.*, legal assistants) to whom it is reasonably necessary to disclose the information for the purpose of the Action, subject to the requirements of Section 7.4.

- For AstraZeneca AB and AstraZeneca Pharmaceuticals LP: Christopher Carlton, Mariam Koohdary, and one other to be named at a later date;
- For Mylan Pharmaceuticals Inc.: Vinny Lee, Thomas Jenkins, and Steven Flynn;
- For Kindeva: Robby McGarry.

Each party may, for good cause, request changes to the list of above-identified In-House Counsel, subject to the requirements of Paragraph 7.4. The other Parties will not unreasonably refuse to consent to such requests.

c) Experts (as defined in this Order) of the Receiving Party, subject to the requirements of Section 7.4;

d) the Court and its personnel;

e) court reporters and their staff, professional jury or trial consultants, mock jurors, and Professional Vendors to whom disclosure is reasonably necessary for purposes of the Action; and

f) witnesses testifying in a deposition or hearing, provided that the witness is: (a) a current employee, attorney, director, officer, consultant, or agent of the Producing

Party, or a corporate designee of the Producing Party under Rule 30(6)(6) of the Federal Rules of CivilProcedure; or (b) a former employee, attorney, director, officer, consultant, or agent of the Producing Party and it appears from the face or metadata of the document that the witness drafted, prepared, contributed to, executed, had knowledge of the substance of, or received the document or the information contained therein.

7.3. Access to "HIGHLY CONFIDENTIAL" Information or Items. Unless otherwise ordered by the Court or permitted in writing by the Designating Party, access to information or items designated "HIGHLY CONFIDENTIAL" shall be limited to persons identified in Paragraphs 7.2(a), (c), (d), (e), and (f). In addition, up to two (2) In-House Counsel, as well support staff of In-House Counsel of the Receiving Party (*e.g.*, legal assistants) to whom it is reasonably necessary to disclose the information for the purposes of the Action, of the Receiving Party shall be allowed access to items designated "HIGHLY CONFIDENTIAL." Such In-House Counsel are identified below:

- For AstraZeneca AB and AstraZeneca Pharmaceuticals LP: ChristopherCarlton and Mariam Koohdary;
- For Mylan Pharmaceuticals Inc.: Thomas Jenkins and Vinny Lee;
- For Kindeva: two counsel to be named at a later date.

7.4. Written Assurance.

a) Each In-House Counsel or Expert who will receive Protected Information pursuant to Paragraph 7.2(b) or (c) or Paragraph 7.3 shall execute the "Acknowledgement and Agreement To Be Bound" of Exhibit A. Counsel for the Producing Party shall be notified at leastseven calendar days prior to the disclosure of any Protected Material to any such person. The notice shall include the name, employer, business address, and title of the

person to whom Protected Material will be disclosed, along with a copy of the executed Acknowledgement and Agreement To Be Bound. For Experts who will receive Protected Material pursuant to Paragraph 7.2(c) or Paragraph 7.3, the notice shall include all information required under Fed. R. Civ. P. 26(a)(2)(B)(iv) and (v), as well as the person's current *curriculum vitae.*

b) A Party that identifies an individual to receive Protected Material and provides the information required by Paragraph 7.4(a) may disclose the subject Protected Material to the identified individual on or after six (6) business days of making the request andproviding the required information (collectively, the "Request Date") unless, within five (5) business days of the Request Date, the Party receives a written objection from the Designating Party setting forth with particularity the grounds on which the objection is based. Any party that fails to object in writing within five (5) business days of the Request Date shall be deemed to have waived such objection and the parties shall be deemed to have agreed upon disclosure to the Expert for purposes of 7.2 and 7.3.

c) A Party that receives a timely written objection must meet and confer with the Designating Party (either in person or by telephone) to try to resolve the matter by agreement within three (3) business days of the written objection. If the dispute is not resolved during the meet and confer, the Party making the objection must seek relief from the Court within five (5) business days of the meet and confer provided by this paragraph, after which any objections are waived. No Protected Material may be disclosed to the Expert until any such objection is resolved or waived by failure to seek relief from the Court.

The burden shall be on the objecting party to establish why an individual may not

receive Protected Material notwithstanding the protections afforded by this Protective Order.

7.5. Patent Prosecution Bar. Experts, in-house counsel, or outside counsel who access information or items designated "HIGHLY CONFIDENTIAL" under this Order may not engage, formally or informally, in any patent prosecution (as used herein, "patent prosecution" means drafting and/or amending patent claims, but is not intended to preclude involvement in oppositions, inter parties reviews, or similar post-grant proceedings before the U.S. Patent and Trademark Office or any foreign patent-granting authority as long as such individuals are not involved directly or indirectly in drafting or amending patent claims or providing recommendations regarding the drafting or amending of patent claims) relating to:

a) inhalation products containing budesonide/formoterol fumarate dihydrate, including but not limited to patent claims related to compounds, compositions, methods of manufacturing, and/or methods of processing such inhalation products; and

b) methods of manufacturing inhalers which contain polyethylene glycol (known as PEG).

This patent prosecution bar, which supersedes any other similar bars the Parties agreed to in connection with negotiating access to the Defendants' ANDAs, shall expire one year from Final Disposition of the Action.

7.6. Prohibited Uses. Protected Material may be used by the Receiving Party solely for purposes of the prosecution or defense of this Litigation and any appeal thereafter, and shall not be used by the Receiving Party for any other business, commercial, competitive, personal, regulatory, patent prosecution, or any other proceeding (e.g., inter

partes review or Citizen Petition), or other purpose whether domestic or foreign. To be clear, Protected Material shall not be used by the Receiving Party for use in connection with any petition or communication with U.S. Food & Drug Administration ("FDA"). It is, however, understood that counsel for a Party, including In-House Counsel designated above, may give advice and opinions to his or her client solely relating to the Action based on his or her evaluation of Protected Material, provided that such advice and opinions shall not directly or indirectly reveal the content of such Protected Material, except by prior written agreement of counsel for the Producing Patty or by Order of the Court.

In-house or outside counsel who access information or item(s) designated as "HIGHLY CONFIDENTIAL" may not engage, formally or informally, or have any direct or indirect involvement or responsibility, in any capacity, regarding the submission of regulatory documents to the FDA or for communication with FDA related to products containing budesonide/formoterol fumarate dihydrate, including without limitation any Citizen Petition. This provision does not apply to in-house or outside counsel who have access to information or item(s) designated as "HIGHLY CONFIDENTIAL" if the submission of regulatory documents to FDA or communication with FDA is unrelated to substantive scientific ANDA issues.

8. PROTECTED MATERIAL SUBPOENAED OR ORDERED PRODUCED INOTHER LITIGATION

If a Party is served with a subpoena or a court order issued in other litigation that compelsdisclosure of any Protected Material, that Party must:

a) promptly notify in writing the Designating Party and include in such notification acopy of the subpoena or court order;

b) promptly notify in writing the party who caused the subpoena or order to issue

in the other litigation that some or all of the material covered by the subpoena or order is subject to this Order and must include a copy of this Order with the notification; and

c) cooperate with respect to all reasonable procedures sought to be pursued by the Designating Party whose Protected Material may be affected.

If the Designating Party timely seeks a protective order, the Party served with the subpoena or court order shall not produce any Protected Material before a determination by an appropriate court, unless the Party has obtained the Designating Party's permission. The Designating Party shall bear the burden and expense of seeking protection in that court of its confidential material. Nothing in these provisions should be construed as authorizing or encouraging a Receiving Party in these Action to disobey a lawful directive from another court.

By entering this order and limiting the disclosure of information in this case, the Court does not intend to preclude another court from finding that information may be relevant and subject to disclosure in another case. Any person or Party subject to this order who becomes subject to a motion to disclose another Party's information designated as "CONFIDENTIAL" or as "HIGHLY CONFIDENTIAL" pursuant to this order shall promptly notify that Party of the motion so that the Party may have an opportunity to appear and be heard on whether that information should be disclosed.

9. APPLICABILITY OF THIS STIPULATED PROTECTIVE ORDER TO NONPARTIES

The terms of this Order are applicable to information produced by Non-Parties in the Action and designated as "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL." Such information produced by Non-Parties in connection with these Action is protected by the remedies and relief provided by this Order.

10. FILING OF PROTECTED MATERIAL

In the event a Party wishes to use any Protected Material or any papers containing or making reference to the content of such material in any pleading or document filed with the Court in these Action, such pleading or document and any appended Protected Material shall befiled under seal pursuant to the Local Rules of Civil Procedure for the Northern District of West Virginia. The parties agree to work cooperatively to file redacted versions of materials filed under seal pursuant to the Local Rules of Civil Procedure for the Northern District of West Virginia.

11. UNAUTHORIZED DISCLOSURE OF PROTECTED MATERIAL

If a Receiving Party learns that, by inadvertence or otherwise, it has disclosed ProtectedMaterial to any person or in any circumstance not authorized under this Order, the Receiving Party must promptly:

a) notify in writing the Designating Party of the unauthorized disclosures,

b) use its best efforts to retrieve all unauthorized copies of the Protected Material,

c) inform the person or persons to whom unauthorized disclosures were made of allthe terms of this Order, and

d) use its best efforts to ensure that no further or greater unauthorized disclosureand/or use thereof is made.

12. INADVERTENT PRODUCTION OF PRIVILEGED OR OTHERWISE PROTECTED MATERIAL

Pursuant to Fed. R. Evid. 502(d) and Fed. R. Civ. P. 26(6)(5), the production of documents subject to the attorney-client privilege or the work-product immunity, or any other privilege or immunity, will not waive the attorney-client privilege, work-product

immunity, or other privilege or immunity in this litigation or in any other federal or state proceeding. For example, the mere production of privileged or work-product-protected information in this litigation as part of a production is not itself a waiver in this litigation or in any other federal or state proceeding. Further, the fact that information was produced shall not be used in any manneras evidence in support of any such alleged waiver.

12.1. If a Party has inadvertently produced information subject to a claim of privilege or immunity, upon a request identifying such information ("Recalled Information"), the information and all copies thereof shall be returned promptly, or a signed verification by Outside Counsel for the Receiving Party certifying that all such information and copies have been destroyed shall be provided to Outside Counsel for the Producing Party no later than seven (7) days, after a request is made by the Producing Party, as required by Rule 26(b)(5)(B). Moreover, any notes or summaries, other than those previously permitted under this section, referring to or relating to any Recalled Information subject to a claim of privilege or immunity shall be destroyed. Nothing herein shall prevent the Receiving Party from preparing and keeping a record containing the date, author, address(es), and such other information as is reasonably necessary toidentify the Recalled Information in order to file a motion to compel production of the information. Such a record may not be used for any purpose other than the preparation and filingof a motion to compel in this litigation.

12.2. If the Receiving Party wishes to contest that the Recalled Information is protectedby the attorney-client privilege or by work-product immunity, the Receiving Party shall so notify the producing party in writing when the written verification under 12.1 is

provided to the Producing Party. Within seven (7) business days after receiving such notification, the Designating Party shall provide to the Receiving Party for each such document or thing a description of the basis for the claim of privilege or immunity. Within seven (7) business days after receiving such description, the Receiving Party may seek relief from the Court to compel production of such documents and things, the protection of which is still disputed, in accordancewith the procedures set forth in the Court's Scheduling Order for resolution of discovery disputes. If a motion to contest the designation is not filed within such seven (7) business days period, any objection to the privilege designation of the Recalled Information is waived.

12.3. The procedures set forth in this Section 12 for challenging the privileged status of an inadvertent production shall not result in any waiver of the attorney-client privilege, the workproduct immunity, or any other privilege or immunity.

13. MISCELLANEOUS

13.1. Right to Further Relief and Modification by the Court. Nothing in this Order abridges the right of any person to seek its modification by the Court in the future. The Court retains the right to allow disclosure of any subject covered by this stipulation or to modify thisstipulation at any time in the interest of justice.

13.2. Right to Assert Other Objections. No Party waives through entry of this Order any right it otherwise would have to object to disclosing or producing any information or item on any ground not addressed in this Order. Similarly, no Party waives any right to object on any ground to use in evidence any of the material covered by this Order.

13.3. Right of a Party to Use Its Own Documents. Nothing in this Order shall affect aParty's use or disclosure of its own Protected Material in any way.

13.4. Right of a Party to Use Independently Obtained Documents. Nothing in this Order shall impose any restrictions on the use or disclosure by a Party of documents, material, or information obtained by such Party independent of formal discovery proceedings in these Action.

13.5. Right to Counsel Client. Nothing in this Protective Order shall bar or otherwise restrict any Outside Counsel or In-House Counsel from rendering advice to his or her client with respect to this litigation and, in the course thereof, relying in a general way upon his or her examination of "CONFIDENTIAL" and "HIGHLY CONFIDENTIAL" Information produced or exchanged in this litigation; provided, however, that in rendering such advice and in otherwise communicating with a person not permitted access to "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" Information under this Protective Order, the Outside Counsel or counsel designated under Paragraphs 7.2 or 7.3 shall not disclose the contents of "CONFIDENTIAL" or "HIGHLY CONFIDENTIAL" Information produced by any other Party.

14. FINAL DISPOSITION

Within sixty (60) days after the Final Disposition of these Action, as defined in Section 4, each Receiving Party must return all Protected Material to the Producing Party or destroy such material. As used in this section, "all Protected Material" includes all copies, abstracts, compilations, summaries, and any other format reproducing or capturing any of the Protected Material.

Whether the Protected Material is returned or destroyed, the Receiving Party must submit a written certification to the Producing Party (and, if not the same person or entity, to the Designating Party) by the 60-day deadline that affirms that the Receiving Party has not

retained any copies, abstracts, compilations, summaries, or any other format reproducing or capturing anyof the Protected Material.

Notwithstanding this provision, Counsel are entitled to retain archival copies of all pleadings, motion papers, trial deposition, and hearing transcripts, legal memoranda, correspondence, deposition and trial exhibits, expert reports, attorney work product, and consultant and expert work product, even if such materials contain Protected Material.

Any such archival copies that contain or constitute Protected Material remain subject to this Order as set forth in Section 4.

Dated: 7-19-2022

JOHN PRESTON BAILEY
UNITED STATES DISTRICT JUDGE

IT IS SO STIPULATED, THROUGH COUNSEL OF RECORD.

DATED: July 18, 2022

/s/ James F. Companion

James F. Companion (#790)
Sandra K. Law (#6071)
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/s/ Gordon H Copland

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EXHIBIT A
ACKNOWLEDGEMENT AND AGREEMENT TO BE BOUND

I, _____, employed by _____ declare under penalty of perjury that I have read and understand the Stipulated Protective Order that was issued by the United States District Court for the Northern District of West Virginia at Clarksburg on _____ in Civil Action No. 1:22-cv-35.

I agree to comply with and to be bound by all terms of this Stipulated Protective Order, and I understand and acknowledge that failure to so comply could expose me to sanctions and punishment in the nature of contempt. I solemnly promise that I will not disclose in any manner any information or item that is subject to this Stipulated Protective Order to any person or entity except in strict compliance with the provisions of this Order.

I further agree to submit to the jurisdiction of the United States District Court for the Northern District of West Virginia for the purpose of enforcing the terms of this Stipulated Protective Order, even if such enforcement proceedings occur after termination of these Action.

Date: _____

City and State where sworn and signed: _____

Printed name: _____

Signature: _____

CERTIFICATE OF SERVICE

I certify that on the 18th day of July 2022, I filed the foregoing **"Stipulated Protective Order"** with the Clerk of the Court using the CM/ECF system, which will send noticed thereof to the following counsel of record:

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Dated: July 18, 2022.

/s/ Gordon H. Copland
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Attorneys for Defendants Mylan Pharmaceuticals Inc. and Kindeva Drug Delivery L.P.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

NDA 21929/S-013

SUPPLEMENT APPROVAL

AstraZeneca Pharmaceuticals LP
1800 Concord Pike
Wilmington, Delaware 19803

Attention: Angela C. Vickers
Regulatory Affairs Director

Dear Ms. Vickers:

Please refer to your Supplemental New Drug Application (sNDA) dated and received June 3, 2008, and your amendments, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA) for Symbicort (budesonide/formoterol fumarate dihydrate) Inhalation Aerosol.

We acknowledge receipt of your amendment dated July 28, 2016, which constituted a complete response to our April 3, 2009, action letter.

This Prior Approval supplemental new drug application proposes an indication for the long-term maintenance treatment of asthma in patients 6 years of age and older.

APPROVAL & LABELING

We have completed our review of this supplemental application, as amended. It is approved, effective on the date of this letter, for use as recommended in the enclosed, agreed-upon labeling text.

WAIVER OF HIGHLIGHTS SECTION

We are waiving the requirements of 21 CFR 201.57(d)(8) regarding the length of Highlights of prescribing information. This waiver applies to all future supplements containing revised labeling unless we notify you otherwise.

CONTENT OF LABELING

As soon as possible, but no later than 14 days from the date of this letter, submit the content of labeling [21 CFR 314.50(l)] in structured product labeling (SPL) format using the FDA automated drug registration and listing system (eLIST), as described at http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm. Content of labeling must be identical to the enclosed labeling (text for the package insert, and Medication Guide), with the addition of any labeling changes in pending "Changes Being Effected" (CBE) supplements, as well as annual reportable changes not included in the enclosed labeling.

Information on submitting SPL files using eList may be found in the guidance for industry titled "SPL Standard for Content of Labeling Technical Qs and As at http://www.fda.gov/downloads/DrugsGuidanceComplianceRegulatoryInformation/Guidances/UCM072392.pdf

The SPL will be accessible from publicly available labeling repositories.

Also within 14 days, amend all pending supplemental applications that include labeling changes for this NDA, including CBE supplements for which FDA has not yet issued an action letter, with the content of labeling [21 CFR 314.50(l)(1)(i)] in MS Word format, that includes the changes approved in this supplemental application, as well as annual reportable changes and annotate each change. To facilitate review of your submission, provide a highlighted or marked-up copy that shows all changes, as well as a clean Microsoft Word version. The marked-up copy should provide appropriate annotations, including supplement number(s) and annual report date(s).

REQUIRED PEDIATRIC ASSESSMENTS

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients, new indications, new dosage forms, new dosing regimens, or new routes of administration are required to contain an assessment of the safety and effectiveness of the product for the claimed indication(s) in pediatric patients unless this requirement is waived, deferred, or inapplicable.

We note that you have fulfilled the pediatric studies requirement for all relevant pediatric age groups for this application.

FULFILLMENT OF POSTMARKETING REQUIREMENT

We note that your submission dated July 28, 2016, contained the final report for the following post-marketing requirement listed in the July 21, 2006, approval letter for NDA 21-929.

1749-2: Deferred submission of pediatric studies for the long term maintenance treatment of asthma in patients 6 to less than 12 years of age.

We have reviewed your submission and conclude that the above requirement was fulfilled.

We remind you that there is a post-marketing requirement listed in our April 14, 2011 correspondence that is still open.

PROMOTIONAL MATERIALS

You may request advisory comments on proposed introductory advertising and promotional labeling. To do so, submit the following, in triplicate, (1) a cover letter requesting advisory comments, (2) the proposed materials in draft or mock-up form with annotated references, and (3) the package insert(s) to:

OPDP Regulatory Project Manager
Food and Drug Administration
Center for Drug Evaluation and Research
Office of Prescription Drug Promotion (OPDP)
5901-B Ammendale Road
Beltsville, MD 20705-1266

Alternatively, you may submit a request for advisory comments electronically in eCTD format. For more information about submitting promotional materials in eCTD format, see the draft Guidance for Industry (available at: http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM443702.pdf).

You must submit final promotional materials and package insert(s), accompanied by a Form FDA 2253, at the time of initial dissemination or publication [21 CFR 314.81(b)(3)(i)]. Form FDA 2253 is available at http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM083570.pdf. Information and Instructions for completing the form can be found at http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM375154.pdf. For more information about submission of promotional materials to the Office of Prescription Drug Promotion (OPDP), see http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm.

REPORTING REQUIREMENTS

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Colette Jackson, Senior Regulatory Health Project Manager, at (301) 796-1230.

Sincerely,

{See appended electronic signature page}

Sally Seymour, M.D.
Deputy Director of Safety
Division of Pulmonary, Allergy, and Rheumatology Products
Office of Drug Evaluation II
Center for Drug Evaluation and Research

ENCLOSURE(S): Content of Labeling

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

SALLY M SEYMOUR
01/27/2017

Viatris Wins Court Decision Invalidating AstraZeneca's Symbicort® Patent

NEWS PROVIDED BY
Viatris Inc. →
Nov 10, 2022, 08:30 ET

PITTSBURGH, Nov. 10, 2022 /PRNewswire/ -- Viatris Inc. (NASDAQ: VTRS), a global healthcare company, today announced that it and Kindeva Drug Delivery L.P. have won a significant court decision in which the U.S. District Court for the Northern District of West Virginia found that AstraZeneca's Symbicort® patent, U.S. Patent No. 10,166,247, is invalid. The district court determined that the patent is invalid on two separate grounds – lack of written description and lack of enablement.

Viatris President Rajiv Malik said: "We are extremely pleased with the court's decision as it clears away yet another of AstraZeneca's invalid patents, which have only served to block generic versions and delay access to this important product for American patients. This affirms Viatris' continuing efforts to break down barriers to patient access for important medicines. We already have FDA approval for our generic Symbicort product, and we look forward to the opportunity to bring our more affordable product to market."

Today's decision marks the fourth Symbicort® patent to be found either not infringed or invalid. In May, after Viatris and Kindeva won an appeal, AstraZeneca stipulated that the Company's budesonide/formoterol fumarate dihydrate products would not infringe U.S.

Patent Nos. 7,759,328, 8,143,239, and 8,575,137.

Viatris and Kindeva previously announced that Mylan Pharmaceuticals Inc., a Viatris subsidiary, received approval from the U.S. Food and Drug Administration (FDA) for its Abbreviated New Drug Application (ANDA) for Breyna™ (Budesonide and Formoterol Fumarate Dihydrate Inhalation Aerosol), the first approved generic version of AstraZeneca's Symbicort®. Breyna, a drug-device combination product, is indicated for certain patients with asthma or chronic obstructive pulmonary disease (COPD) and will be available in 160 mcg/4.5 mcg and 80 mcg/4.5 mcg dosage strengths.

AstraZeneca recently filed a new complaint asserting infringement of a fifth Symbicort® patent, which issued April 26, 2022, and shares the same specification and named inventors as the '247, '328, '239 and '137 patents. A trial on U.S. Patent No. 11,311,558 is currently scheduled for December 13, 2022. The '558 patent expires on January 29, 2023, with pediatric exclusivity expiring on July 29, 2023.

Forward-Looking Statements

This press release includes statements that constitute "forward-looking statements." These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Such forward looking statements may include statements about the decision by the U.S. District Court for the Northern District of West Virginia that AstraZeneca's Symbicort® patent, U.S. Patent No. 10,166,247, is invalid; Viatris looking forward to the opportunity to bring its more affordable product to market; and the outcome of ongoing litigation. Because forward-looking statements inherently involve risks and uncertainties, actual future results may differ materially from those expressed or implied by such statements. Factors that could cause or contribute to such differences include, but are not limited to: the potential impact of public health outbreaks, epidemics and pandemics, including the ongoing challenges and uncertainties posed by the COVID-19 pandemic; that the pending transaction between Viatris and Biocon Biologics Limited, pursuant to which Viatris will contribute its biosimilar products and programs to Biocon Biologics in exchange for cash consideration and a convertible preferred equity interest in Biocon Biologics, may not achieve its intended benefits; the integration of Mylan N.V. and Pfizer Inc.'s Upjohn business (the "Upjohn Business"), which combined to form Viatris (the "Combination") and the implementation of our global restructuring initiatives being more difficult, time consuming

or costly than expected, or being unsuccessful; the ability to achieve expected benefits, synergies, and operating efficiencies in connection with the Combination or its restructuring initiatives within the expected timeframe or at all; actions and decisions of healthcare and pharmaceutical regulators; changes in healthcare and pharmaceutical laws and regulations in the U.S. and abroad; any regulatory, legal or other impediments to Viatris' ability to bring new products to market, including but not limited to "at-risk" launches; Viatris' or its partners' ability to develop, manufacture, and commercialize products; the scope, timing and outcome of any ongoing legal proceedings, and the impact of any such proceedings; any significant breach of data security or data privacy or disruptions to our information technology systems; risks associated with international operations; the ability to protect intellectual property and preserve intellectual property rights; changes in third-party relationships; the effect of any changes in Viatris' or its partners' customer and supplier relationships and customer purchasing patterns; the impacts of competition; changes in the economic and financial conditions of Viatris or its partners; uncertainties and matters beyond the control of management; and the other risks described in Viatris' filings with the Securities and Exchange Commission (SEC). Viatris routinely uses its website as a means of disclosing material information to the public in a broad, non-exclusionary manner for purposes of the SEC's Regulation Fair Disclosure (Reg FD). Viatris undertakes no obligation to update these statements for revisions or changes after the date of this release other than as required by law.

About Viatris

Viatris Inc. (NASDAQ: VTRS) is a global healthcare company empowering people worldwide to live healthier at every stage of life. We provide access to medicines, advance sustainable operations, develop innovative solutions and leverage our collective expertise to connect more people to more products and services through our one-of-a-kind Global Healthcare Gateway®. Formed in November 2020, Viatris brings together scientific, manufacturing and distribution expertise with proven regulatory, medical, and commercial capabilities to deliver high-quality medicines to patients in more than 165 countries and territories. Viatris' portfolio comprises more than 1,400 approved molecules across a wide range of therapeutic areas, spanning both non-communicable and infectious diseases, including globally recognized brands, complex generic and branded medicines, a portfolio of biosimilars and a variety of over-the-counter consumer products. With approximately 37,000 colleagues globally, Viatris

is headquartered in the U.S., with global centers in Pittsburgh, Shanghai and Hyderabad, India. Learn more at viatris.com and investor.viatris.com, and connect with us on Twitter at @ViatrisInc, LinkedIn and YouTube.

About Kindeva Drug Delivery

Headquartered in Woodbury, Minnesota, Kindeva Drug Delivery is a leading global contract, research, development and manufacturing organization (CRDMO) in the pharmaceutical industry, with additional R&D sites in Union City, California and Loughborough, UK as well as major manufacturing sites in Northridge, California, Loughborough, UK and Clitheroe, UK. Kindeva provides unique technologies and quality services to its customers, ranging from formulation and product development to commercial manufacturing. Kindeva focuses on complex drug programs, and its current offering spans inhalation drug delivery, including metered-dose and dry power inhalers as well as nebulizer delivery, transdermal drug delivery, intradermal drug delivery, and connected drug delivery. Kindeva employs approximately 1,000 people worldwide. Learn more at www.kindevadd.com and connect with us on LinkedIn.

SOURCE Viatris Inc.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
AT CLARKSBURG

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP,

Plaintiffs,

v.

MYLAN PHARMACEUTICALS INC. and KINDEVA DRUG DELIVERY L.P.,

Defendants.

Civil Action No. **1:22-CV-35 (Kleeh)**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs AstraZeneca AB and AstraZeneca Pharmaceuticals LP (collectively, "Plaintiffs"), by their attorneys, file this Complaint against Defendants Mylan Pharmaceuticals Inc. ("Mylan") and Kindeva Drug Delivery L.P. ("Kindeva") (collectively, "Defendants"), and allege the following:

NATURE OF THE ACTION

1. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 et seq., and in particular under 35 U.S.C. § 271(e). This action relates to Abbreviated New Drug Application ("ANDA") No. 211699 filed by or for the benefit of Defendants with the United States Food and Drug Administration ("FDA"). Through this ANDA, Defendants seek approval to engage in the commercial manufacture, use, offer for sale, sale, and/or importation of generic versions of Plaintiffs' Symbicort® pharmaceutical products prior to the expiration of U.S. Patent No. 11,311,558 ("the '558 patent"). Plaintiffs seek injunctive relief precluding infringement, attorneys' fees, and any other relief the Court deems just and proper.

THE PARTIES

Plaintiffs

2. Plaintiff AstraZeneca AB is a corporation organized and existing under the laws of Sweden, with its principal place of business at S-151 85 Södertälje, Sweden.

3. Plaintiff AstraZeneca Pharmaceuticals LP is a limited partnership organized and existing under the laws of the State of Delaware, with its principal place of business at 1800 Concord Pike, Wilmington, Delaware 19803. AstraZeneca Pharmaceuticals LP is the holder of approved New Drug Application No. 021929 for Symbicort.

Defendants

4. On information and belief, Defendant Mylan Pharmaceuticals Inc. is a company organized and existing under the laws of the State of West Virginia, with a place of business at 781 Chestnut Ridge Road, Morgantown, West Virginia 26505.

5. On information and belief, Defendant Kindeva is a company organized under and existing under the laws of the State of Delaware, with a place of business at 42 Water Street, Building 75, St. Paul, Minnesota 55170.

6. Defendants, working in collaboration with each other and with or through their subsidiaries, agents, and affiliates, are in the business of, among other things, manufacturing, marketing, distributing, offering for sale, and selling generic versions of branded pharmaceutical products in the United States. As a part of this business, Defendants participate in operations related to preparing and filing ANDAs with FDA.

BACKGROUND

The NDA

7. AstraZeneca Pharmaceuticals LP is the holder of New Drug Application ("NDA") No. 021929 for Symbicort (budesonide/formoterol fumarate dihydrate) Inhalation Aerosol.

8. Each Symbicort canister is formulated as a pressurized metered dose inhaler ("inhaler"). Symbicort is a prescription drug approved for the treatment of asthma in patients 6 years of age and older and maintenance treatment in patients with chronic obstructive pulmonary disease ("COPD") including bronchitis and emphysema. Budesonide and formoterol fumarate dihydrate are the two active ingredients in Symbicort. Symbicort is available in an 80 mcg budesonide/4.5 mcg formoterol fumarate dihydrate dosage and a 160 mcg budesonide/4.5 mcg formoterol fumarate dihydrate dosage.

9. FDA approved NDA No. 021929 on July 21, 2006.

10. Plaintiff AstraZeneca Pharmaceuticals LP sells and distributes Symbicort throughout the United States pursuant to NDA No. 021929.

The Patent-in-Suit

11. The '558 patent, entitled "Composition for Inhalation," was issued by the United States Patent and Trademark Office ("the USPTO") on April 26, 2022, to AstraZeneca AB, upon assignment from the inventors Nayna Govind and Maria Marlow. The '558 patent claims, *inter alia*, a pharmaceutical composition comprising formoterol fumarate dihydrate, budesonide or an epimer thereof, 1,1,1,2,3,3,3-heptafluoropropane ("HFA227"), PVP K25 (polyvinyl pyrrolidone with a nominal K-value of 25) and PEG 1000 (polyethylene glycol with a polymer length resulting in an average molecular weight of 1000 daltons), wherein the PVP K25 and PEG are present at certain concentrations. Specifically, claim 3 recites a pharmaceutical composition comprising formoterol, budesonide or an epimer thereof, HFA 227, about 0.0005 to about 0.05% w/w PVP K25, and 0.3% w/w PEG 1000.

12. The '558 patent is related through continuation applications to U.S. Patent Nos. 7,759,328 ("the '328 patent"), 8,143,239 ("the '239 patent"), 8,575,137 ("the '137 patent"), and 10,166,247 ("the '247 patent"), which are also directed to pharmaceutical compositions of

formoterol, budesonide, HFA 227, PVP K25, and PEG 1000 similar to the '558 patent. The patents share a common specification.

13. A true and correct copy of the '558 patent is attached as Exhibit A.

14. Plaintiff AstraZeneca AB has been and still is the owner of the '558 patent.

ANDA No. 211699

15. On information and belief, 3M Company, through its 3M Drug Delivery Systems division, submitted ANDA No. 211699 to FDA under 21 U.S.C. § 355(j), in order to obtain approval to engage in the commercial manufacture, use or sale in the United States of Budesonide and Formoterol Fumarate Dihydrate Inhalation Aerosol, 80 mcg/4.5 mcg and 160 mcg/4.5 mcg ("Mylan's ANDA Products"), generic versions of the two dosage forms of Symbicort, prior to the expiration of the patent-in-suit.

16. On information and belief, FDA sent a Paragraph IV Acknowledgment Letter for ANDA No. 211699 to 3M on August 15, 2018.

17. On information and belief, 3M transferred certain interests in ANDA No. 211699 to Mylan on August 17, 2018.

18. On information and belief, on May 1, 2020, 3M closed on a transaction whereby 3M sold substantially all of its drug delivery systems business (f/k/a 3M Drug Delivery Systems) to an affiliate of Altaris Capital Partners, LLC ("Altaris").

19. On information and belief, following this transaction, Altaris launched Kindeva as an independent company, and all of 3M's activities relating to ANDA No. 211699 were transferred to Kindeva.

20. On information and belief, Mylan purports to be the current owner of ANDA No. 211699.

21. On information and belief, Kindeva, formerly 3M Drug Delivery Systems, will

manufacture Mylan's ANDA Products.

22. On information and belief, Defendants have assisted with and participated in the preparation and submission of ANDA No. 211699, have provided material support to the preparation and submission of ANDA No. 211699, and intend to support the further prosecution of ANDA No. 211699.

23. On information and belief, Defendants will manufacture, offer for sale, or sell Mylan's ANDA Products within the United States, including within West Virginia, or will import Mylan's ANDA Products into the United States, including West Virginia.

24. On information and belief, Defendants will actively induce or contribute to infringement by Mylan's ANDA Products.

25. On information and belief, ANDA No. 211699 was approved on March 16, 2022, and Defendants intend to support the further prosecution of ANDA No. 211699 before FDA and may only manufacture, offer for sale, or sell Mylan's ANDA Products within the United States, including within West Virginia; import Mylan's ANDA Products into the United States, including West Virginia; and actively induce or contribute to infringement by Mylan's ANDA Products subject to the maintenance of FDA's approval.

26. By letters dated August 30, 2018 ("First Notice Letter") and October 11, 2019 ("Second Notice Letter"), Mylan notified Plaintiffs that it had filed ANDA No. 211699 seeking approval to market Mylan's ANDA Products and that Mylan was providing information to Plaintiffs pursuant to 21 U.S.C. § 355(j)(2)(B) and 21 C.F.R. §§ 314.94 and 314.95. The First and Second Notice Letters, sent by Mylan, represented that Mylan owned ANDA No. 211699 and that Mylan had submitted purported Paragraph IV certifications to obtain approval to engage in the commercial manufacture, use, or sale of the product described in ANDA No. 211699

before the expiration of the patents listed in FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, or Orange Book, for Symbicort.

27. In its First Notice Letter, Mylan alleged that the '328, '239, and '137 patents are invalid, not infringed by the commercial manufacture, use, or sale of Mylan's ANDA Products, and/or unenforceable. In its Second Notice Letter, Mylan alleged that the '247 patent is invalid, not infringed by the commercial manufacture, use, or sale of Mylan's ANDA Products, and/or unenforceable.

28. The parties proceeded to trial on the '328, '239, and '137 patents (the "Trial Patents") in October 2020. Prior to trial, Defendants stipulated to infringement of the asserted claims of the Trial Patents, which are similar to those of the '558 patent and likewise recite pharmaceutical compositions of formoterol, budesonide or an epimer thereof, HFA 227, PVP K25, and PEG 1000. For example, claim 13 of the '328 patent recites "[a] pharmaceutical composition comprising formoterol fumarate dihydrate, budesonide, HFA227, PVP K25, and PEG-1000, wherein the formoterol fumarate dihydrate is present at a concentration of 0.09 mg/ml, the budesonide is present at a concentration of 2 mg/ml, the PVP K25 is present at a concentration of 0.001% w/w, and the PEG-1000 is present at a concentration of 0.3% w/w."

29. After a five-day trial, the Court entered judgment of nonobviousness as to each asserted claim. The Court held that the person of ordinary skill in the art ("POSA") would not have been motivated to make the multiple independent selections from the prior art required to arrive at the asserted claims, including the propellant HFA227, the excipient PVP K25, the excipient PEG-1000, and the concentration of PEG-1000. *AstraZeneca AB v. Mylan Pharm. Inc.*, 522 F. Supp. 3d 200, 216–19 (N.D. W. Va. 2021). Furthermore, the Court found that the prior art "teaches away and does not render the claims obvious," because it "cut against the very

goal a POSA would have been trying to achieve—a stable product with a consistent dose." *Id.* at 219–20. The Court likewise found that "a POSA would not have had a reasonable expectation of success in creating a stable budesonide pMDI using HFA 227, PVP K25, and PEG-1000, much less when these ingredients were combined with formoterol," *id.* at 220, and that the claimed compositions demonstrated unexpected properties, *id.* at 220-21.

30. Mylan appealed, and the Federal Circuit affirmed the Court's judgment of nonobviousness, specifically upholding the Court's finding that the prior art taught away from the claimed invention. *AstraZeneca AB v. Mylan Pharm. Inc.*, 19 F.4th 1325, 1337–38 (Fed. Cir. 2021). The Federal Circuit disagreed with the Court's construction of a term not at issue in most claims of the '558 patent ("0.001%"), and vacated for further proceedings, *id.* at 1338, which are currently underway in this District with respect to the '247 patent.

31. By letter dated March 8, 2022, Plaintiffs notified Mylan through its counsel that the USPTO allowed the pending claims of U.S. Patent Application No. 16/832,590 ("the '590 application"), which issued as the '558 patent on April 26, 2022. AstraZeneca's letter notified Mylan that its proposed generic Symbicort products infringe every limitation of the allowed claims. AstraZeneca's letter also notified Mylan that the allowed claims were substantially identical to the invention claimed in U.S. Patent Application Publication No. 2021/0069215 ("the '215 publication").

32. A copy of AstraZeneca's letter, which includes the '215 publication, is attached here as Exhibit B.

JURISDICTION

33. Plaintiffs incorporate each of the preceding paragraphs as though fully set forth herein.

34. Subject matter jurisdiction over this action is proper pursuant to 28 U.S.C.

§§ 1331 and 1338.

Personal Jurisdiction over Mylan Pharmaceuticals Inc.

35. On information and belief, Defendant Mylan is a company organized and existing under the laws of the State of West Virginia, with a place of business at 781 Chestnut Ridge Road, Morgantown, West Virginia 26505.

36. On information and belief, Defendant Mylan has extensive contacts with the State of West Virginia, regularly conducts business in the State of West Virginia, either directly or through one or more of its wholly owned subsidiaries, agents, and/or alter egos, has purposefully availed itself of the privilege of doing business in the State of West Virginia, and intends to sell in the State of West Virginia the products described in ANDA No. 211699. Furthermore, on information and belief, Mylan has a regular and established place of business in this judicial district.

37. On information and belief, Defendant Mylan is engaged in the business of challenging patents held by branded pharmaceutical companies, including in this judicial district. Mylan has consented to jurisdiction and venue in this Court, and availed itself of the protections afforded by this Court, including by asserting counterclaims in this Court.

38. This Court has personal jurisdiction over Defendant Mylan by virtue of the fact that Mylan has committed, or aided, abetted, contributed to, and/or participated in the commission of, the tortious act of patent infringement, and intends a future course of conduct that includes acts of patent infringement in the State of West Virginia, including acts of patent infringement with respect to Mylan's ANDA Products. These acts have led and will lead to foreseeable harm and injury to AstraZeneca AB and AstraZeneca Pharmaceuticals LP in this judicial district. For example, on information and belief, Mylan will make, use, import, sell, and/or offer for sale Mylan's ANDA Products throughout the United States, including in the

State of West Virginia, prior to the expiration of the patent-in-suit.

39. On information and belief, Defendant Mylan, and/or its subsidiaries, affiliates or agents, intends to engage in the commercial manufacture and sale of Mylan's ANDA Products, before the expiration of the patent-in-suit throughout the United States, including in this judicial district, and to derive substantial revenue therefrom.

40. On information and belief, Defendant Mylan, and/or its subsidiaries, affiliates or agents, intends to place Mylan's ANDA Products into the stream of commerce with the reasonable expectation or knowledge and the intent that such product will be purchased and used by consumers in this judicial district.

41. On information and belief, Defendant Mylan regularly solicits business in the State of West Virginia, engages in other persistent courses of conduct in this State, and/or derives substantial revenues from the services or products used or consumed in the State of West Virginia.

Personal Jurisdiction over Kindeva Drug Delivery L.P.

42. This Court has personal jurisdiction over Defendant Kindeva by virtue of the fact that Kindeva has committed, or aided, abetted, contributed to, and/or participated in the commission of, the tortious act of patent infringement, and intends a future course of conduct that includes acts of patent infringement in the State of West Virginia, including acts of patent infringement with respect to Mylan's ANDA Products. These acts have led and will lead to foreseeable harm and injury to AstraZeneca AB and AstraZeneca Pharmaceuticals LP in this judicial district. For example, on information and belief, Kindeva will make, use, import, sell, and/or offer for sale Mylan's ANDA Products, throughout the United States, including in the State of West Virginia, prior to the expiration of the patent-in-suit.

43. On information and belief, Defendant Kindeva and/or its subsidiaries, affiliates or

agents, intends to engage in the commercial manufacture and/or sale of Mylan's ANDA Products, before the expiration of the patent-in-suit throughout the United States, including in this judicial district, and to derive substantial revenue therefrom.

44. On information and belief, Defendant Kindeva regularly conducts and/or solicits business in the State of West Virginia, engages in other persistent courses of conduct in this State, and/or derives substantial revenues from the services or products used or consumed in the State of West Virginia.

45. On information and belief, Defendants participated in the preparation, development, and filing of ANDA No. 211699, and its underlying subject matter, with the intent to market, sell, and/or distribute Mylan's ANDA Products to the residents of the State of West Virginia. Plaintiffs' cause of action arose from Defendants' contact with the State of West Virginia.

46. This Court therefore has personal jurisdiction over all Defendants.

VENUE

47. Plaintiffs incorporate each of the preceding paragraphs as though fully set forth herein.

48. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391 and 1400(b).

49. Venue is proper as to Defendant Mylan because Mylan resides in this judicial district, has committed, or aided, abetted, contributed to, and/or participated in the commission of, the tortious act of patent infringement, intends a future course of conduct that includes acts of patent infringement in the State of West Virginia, and has a regular and established place of business in this judicial district. On information and belief, Defendants will make, use, import, sell, and/or offer for sale Mylan's ANDA Products throughout the United States, including in the

State of West Virginia, prior to the expiration of the patent-in-suit.

50. Venue is proper as to Defendant Kindeva because Kindeva has committed, or aided, abetted, contributed to, and/or participated in the commission of, the tortious act of patent infringement, intends a future course of conduct that includes acts of patent infringement in the State of West Virginia. These acts have led and will lead to foreseeable harm and injury to AstraZeneca AB and AstraZeneca Pharmaceuticals LP in this judicial district. For example, on information and belief, Defendant Kindeva will make, use, import, sell, and/or offer for sale Mylan's ANDA Products throughout the United States, including in the State of West Virginia, prior to the expiration of the patent-in-suit.

51. On information and belief, Kindeva has consented to venue in West Virginia for purposes of this litigation.

52. Venue is proper as to all Defendants.

COUNT 1
INFRINGEMENT OF THE '558 PATENT

53. Plaintiffs incorporate by reference the preceding paragraphs as though fully set forth herein.

54. On information and belief, Defendants submitted or caused the submission of ANDA No. 211699 to the FDA under 21 U.S.C. § 355(j) in order to obtain approval to market Mylan's ANDA Products in the United States before the expiration of the '558 patent.

55. Under 35 U.S.C. § 271(e)(2)(A), the submission of ANDA No. 211699 to obtain approval for the commercial manufacture, use, sale, offer for sale, or importation into the United States of Mylan's ANDA Products before the expiration of the '558 patent constitutes infringement of one or more claims of the '558 patent, either literally or under the doctrine of equivalents.

56. Defendants' commercial manufacture, use, sale, offer for sale, or importation into the United States of Mylan's ANDA Products would infringe the '558 patent and/or actively induce and/or contribute to infringement of the '558 patent. Accordingly, unless enjoined by this Court, Defendants will make, use, offer to sell, or sell Mylan's ANDA Products within the United States, or will import Mylan's ANDA Products into the United States, and will thereby infringe, contribute to the infringement of, and/or induce the infringement of one or more claims of the '558 patent under 35 U.S.C. §§ 271(a), (b), (c), (f), and/or (g).

57. On information and belief, Defendants will market and distribute Mylan's ANDA Products to resellers, pharmacies, hospitals and other clinics, health care professionals, and end users. On information and belief, Defendants will also knowingly and intentionally accompany Mylan's ANDA Products with a product label and product insert that will include instructions for using and administering the ANDA Products. Accordingly, Defendants will induce health care professionals, resellers, pharmacies, and end users of Mylan's ANDA Products to directly infringe one or more claims of the '558 patent. In addition, on information and belief, Defendants will encourage acts of direct infringement with knowledge of the '558 patent and knowledge that they are encouraging infringement.

58. Defendants have actual and constructive notice of the '558 patent by at least April 26, 2022 through the filing of this Complaint. Based on this disclosure, Defendants have had further knowledge of, or were willfully blind to, the '558 patent and that Mylan's ANDA Products would infringe one or more claims of the '558 patent.

59. Defendants have no reasonable basis to assert that the commercial manufacture, use, offer for sale, or sale of Mylan's ANDA Products will not contribute to the infringement of and/or induce the infringement of the '558 patent.

60. Plaintiffs will be substantially and irreparably harmed by the infringing activities described above unless those activities are precluded by this Court. Plaintiffs have no adequate remedy at law.

COUNT 2
DECLARATORY JUDGMENT OF INFRINGEMENT OF THE '558 PATENT

61. Plaintiffs restate, reallege, and incorporate by reference the preceding paragraphs as though fully set forth herein.

62. Plaintiffs' claims also arise under the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202.

63. On information and belief, Mylan's ANDA Products will be made, offered for sale, sold, or otherwise distributed in the United States, including in the State of West Virginia, by or through Defendants and their affiliates.

64. On information and belief, Defendants know that health care professionals or patients will use Mylan's ANDA Products in accordance with the labeling sought by ANDA No. 211699 and Defendants will therefore contribute to the infringement of and/or induce the infringement of one or more claims of the '558 patent under one or more of 35 U.S.C. §§ 271(b), (c), (f) and/or (g).

65. On information and belief, Defendants' infringing activity, including the commercial manufacture, use, offer to sell, sale, or importation of Mylan's ANDA Product complained of herein will begin imminently. Any such conduct before the '558 patent expires will infringe, contribute to the infringement of, and/or induce the infringement of one or more claims of the '558 patent under one or more of 35 U.S.C. §§ 271(a), (b), (c), (f) and/or (g).

66. As a result of the foregoing facts, there is a real, substantial, and continuing justiciable controversy between Plaintiffs and Defendants concerning liability for the

infringement of the '558 patent for which this Court may grant declaratory relief consistent with Article III of the United States Constitution.

67. Plaintiffs will be substantially and irreparably harmed by Defendants' infringing activities unless those activities are enjoined by this Court. Plaintiffs have no adequate remedy at law.

68. This case is exceptional, and Plaintiffs are entitled to an award of attorneys' fees under 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request the following relief:

A. A declaratory judgment that under 35 U.S.C. § 271(e)(2)(A), the submission to the FDA of ANDA No. 211699 to obtain approval for the commercial manufacture, use, offer for sale, or sale in, or importation into, the United States of Mylan's ANDA Products before the expiration of the '558 patent was an act of infringement of one or more claims of the '558 patent;

B. A declaratory judgment that under one or more of 35 U.S.C. §§ 271(a), (b), (c), (f) and/or (g), Defendants' commercial manufacture, use, offer for sale, or sale in, or importation into, the United States of Mylan's ANDA Products, or inducing or contributing to such conduct, would constitute infringement of one or more claims of the '558 patent;

C. The entry of a permanent injunction, pursuant to 35 U.S.C. §§ 271(e)(4)(B) and/or § 283, enjoining Defendants, their affiliates and subsidiaries, and all persons and entities acting in concert with Defendants from commercially manufacturing, using, offering for sale, or selling Mylan's ANDA Products within the United States, or importing Mylan's ANDA Products into the United States, until the expiration of the '558 patent;

D. The entry of an order, pursuant to 35 U.S.C. § 271(e)(4)(A), that the effective date of any FDA approval of ANDA No. 211699 shall be no earlier than the expiration date of the

'558 patent, or any later expiration of exclusivity for the '558 patent, including any extensions or regulatory exclusivities;

E. An award of damages or other relief, pursuant to 35 U.S.C. §§ 271(e)(4)(C) and/or 284, if Defendants engage in the commercial manufacture, use, offer for sale, sale, and/or importation of Mylan's ANDA Products, or any product that infringes the '558 patent, or induces or contributes to such conduct, prior to the expiration of the '558 patent;

F. The entry of judgment declaring that Defendants' acts render this case an exceptional case, and awarding Plaintiffs attorneys' fees pursuant to 35 U.S.C. §§ 271(e)(4) and 285;

G. An award to Plaintiffs of their costs and expenses in this action; and

H. Such further relief as this Court may deem just and proper.

Dated: April 26, 2022

Respectfully submitted,

SCHRADER COMPANION DUFF & LAW, PLLC

/s/ Sandra K. Law

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Guidance for Industry

Changes to an Approved NDA or ANDA

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
April 2004
CMC

Revision 1

Guidance for Industry

Changes to an Approved NDA or ANDA

Additional copies are available from:

Office of Training and Communications
Division of Drug Information, HFD-240
Center for Drug Evaluation and Research
Food and Drug Administration
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http://www.fda.gov/cder/guidance/index.htm

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
April 2004
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Revision 1

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*Contains Nonbinding Recommendations**

Guidance for Industry[1]

Changes to an Approved NDA or ANDA

This guidance represents the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public.** You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the FDA staff responsible for implementing this guidance. If you cannot identify the appropriate FDA staff, call the appropriate number listed on the title page of this guidance.

** Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect. If you have any questions about the effect of any portion of this guidance, contact the Office of Pharmaceutical Science, Center for Drug Evaluation and Research (HFD-003), Food and Drug Association, 5600 Fishers Lane, Rockville, MD 20857.

I. INTRODUCTION AND BACKGROUND

This guidance provides recommendations to holders of new drug applications (NDAs) and abbreviated new drug applications (ANDAs) who intend to make postapproval changes in accordance with section 506A of the Federal Food, Drug, and Cosmetic Act (the Act) and § 314.70 (21 CFR 314.70). The guidance covers recommended reporting categories for postapproval changes for drugs other than specified biotechnology and specified synthetic biological products. It supersedes the guidance of the same title published November 1999. Recommendations are provided for postapproval changes in (1) components and composition, (2) manufacturing sites, (3) manufacturing process, (4) specifications, (5) container closure system, and (6) labeling, as well as (7) miscellaneous changes and (8) multiple related changes.

Recommendations on reporting categories for changes relating to specified biotechnology and specified synthetic biological products regulated by CDER are found in the guidance for industry

[1] This guidance has been prepared under the direction of the Chemistry, Manufacturing and Controls Coordinating Committee in the Center for Drug Evaluation and Research (CDER) at the Food and Drug Administration (FDA).

Paperwork Reduction Act Public Burden Statement: This guidance contains information collection provisions that are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501-3520). The collection(s) of information in this guidance were approved under OMB Control No. 0910-0538 (until August 31, 2005).

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

entitled *Changes to an Approved Application for Specified Biotechnology and Specified Synthetic Biological Products* (July 1997).[2]

On November 21, 1997, the President signed the Food and Drug Administration Modernization Act of 1997 (the Modernization Act).[3] Section 116 of the Modernization Act amended the the Act by adding section 506A, which provides requirements for making and reporting manufacturing changes to an approved application and for distributing a drug product made with such changes. The FDA has revised its regulations on supplements and other changes to an approved application (21 CFR 314.70) to conform to section 506A of the Act.

This guidance does not provide recommendations on the specific information that should be developed by an applicant to assess the effect of the change on the identity, strength (e.g., assay, content uniformity), quality (e.g., physical, chemical, and biological properties), purity (e.g., impurities and degradation products), or potency (e.g., biological activity, bioavailability, bioequivalence) of a drug product as these factors may relate to the safety or effectiveness of the drug product. An applicant should consider all relevant CDER guidance documents for recommendations on the information that should be submitted to support a given change.[4]

CDER has published guidances, including the SUPAC (scale-up and postapproval changes) guidances, that provide recommendations on reporting categories. To the extent that the recommendations on ***reporting categories*** in this guidance are found to be inconsistent with guidances published before this guidance was finalized, the recommended reporting categories in such previously published guidances are superseded by this guidance. This guidance does not provide extensive recommendations on reporting categories for components and composition changes (see section V). Therefore, recommended reporting categories for components and composition changes provided in previously published guidances, such as the SUPAC guidances, still apply. Section 506A of the Act and § 314.70(c) provide for two types of changes-being-effected supplements (see section II), while previously there was only one type. It is important for applicants to use this guidance to determine which type of changes-being-effected supplement is recommended. CDER intends to update the previously published guidances to make them consistent with this guidance.

If guidance for either recommended reporting categories or information that should be submitted to support a particular change is not available, the appropriate CDER chemistry or microbiology review staff can be consulted for advice.

FDA's guidance documents, in general, do not establish legally enforceable responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in Agency guidances means that something is suggested or recommended, but not required. Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect. If you

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[2] FDA is currently revising the 1997 guidance and intends to issue it in draft for public comment.

[3] Public Law 105-115.

[4] A list of CDER guidances is available on the Internet at http://www.fda.gov/cder/guidance/index.htm.

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

have any questions about the effect of any portion of this guidance, contact the Office of Pharmaceutical Science, Center for Drug Evaluation and Research (HFD-003), Food and Drug Association, 5600 Fishers Lane, Rockville, MD 20857.

II. REPORTING CATEGORIES

Section 506A of the Act and § 314.70 provide for four reporting categories that are distinguished in the following paragraphs.

A ***major change*** is a change that has a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product. A major change requires the submission of a supplement and approval by FDA prior to distribution of the drug product made using the change. This type of supplement is called, and should be clearly labeled, a ***Prior Approval Supplement*** (§ 314.70(b)). An applicant may ask FDA to expedite its review of a prior approval supplement for public health reasons (e.g., drug shortage) or if a delay in making the change described in it would impose an extraordinary hardship on the applicant. This type of supplement is called, and should be clearly labeled, a *Prior Approval Supplement - Expedited Review Requested* (§ 314.70(b)(4)).[5] FDA is most likely to grant requests for expedited review based on extraordinary hardship for manufacturing changes made necessary by catastrophic events (e.g., fire) or by events that could not be reasonably foreseen and for which the applicant could not plan.

A ***moderate change*** is a change that has a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of the drug product as these factors may relate to the safety or effectiveness of the drug product. There are two types of moderate change. One type of moderate change requires the submission of a supplement to FDA at least 30 days before the distribution of the drug product made using the change. This type of supplement is called, and should be clearly labeled, a ***Supplement - Changes Being Effected in 30 Days*** (§ 314.70(c)(3)). The drug product made using a moderate change cannot be distributed if FDA informs the applicant within 30 days of receipt of the supplement that a prior approval supplement is required (§ 314.70(c)(5)(i)). For each change, the supplement must contain information determined by FDA to be appropriate and must include the information developed by the applicant in assessing the effects of the change (§ 314.70(a)(2) and (c)(4)). If FDA informs the applicant within 30 days of receipt of the supplement that information is missing, distribution must be delayed until the supplement has been amended to provide the missing information (§ 314.70(c)(5)(ii)).

FDA may identify certain moderate changes for which distribution can occur when FDA receives the supplement (§ 314.70(c)(6)). This type of supplement is called, and should be clearly labeled, a ***Supplement - Changes Being Effected***. If, after review, FDA disapproves a changes-being-effected-in-30-days supplement or changes-being-effected supplement, FDA may order the

[5] Internal Agency policies and procedures relating to processing requests for expedited review of supplements to approved ANDAs and NDAs are documented in CDER's Manual of Policies and Procedures (MAPP) at 5240.1 and 5310.3, respectively. MAPPs can be located on the Internet at http://www.fda.gov/cder/mapp.htm.

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

manufacturer to cease distribution of the drug products made using the disapproved change (§ 314.70(c)(7)).

A ***minor change*** is a change that has minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of the drug product as these factors may relate to the safety or effectiveness of the drug product. The applicant must describe minor changes in its next ***Annual Report*** (§ 314.70(d)).

Under § 314.70(e), an applicant can submit one or more protocols (i.e., comparability protocols) describing tests, studies, and acceptance criteria to be achieved to demonstrate the absence of an adverse effect from specified types of changes. A comparability protocol can be used to reduce the reporting category for specified changes. A proposed comparability protocol that was not approved as part of the original application must be submitted as a prior approval supplement (314.70(e)). On February 25, 2003, FDA issued a draft guidance on comparability protocols entitled *Comparability protocols - Chemistry, Manufacturing, and Controls Information*.

III. GENERAL REQUIREMENTS

Other than for editorial changes in previously submitted information (e.g., correction of spelling or typographical errors, reformatting of batch records), an applicant must notify FDA about each change in each condition established in an approved application beyond the variations already provided for in the application (§ 314.70(a)(1)).

A supplement or annual report must include a list of all changes contained in the supplement or annual report. On the list, FDA recommends that the applicant describe each change in enough detail to allow FDA to quickly determine whether the appropriate reporting category has been used. For supplements, this list must be provided in the cover letter (§ 314.70(a)(6)). In annual reports, the list should be included in the summary section (§ 314.81(b)(2)(i)). The applicant must describe each change fully in the supplement or annual report (§ 314.70(a)(1)).

An applicant making a change to an approved application under section 506A of the Act must also conform to other applicable laws and regulations, including current good manufacturing practice (CGMP) requirements of the Act (21 U.S.C. 351(a)(2)(B)) and applicable regulations in Title 21 of the *Code of Federal Regulations* (e.g., 21 CFR parts 210, 211, 314). For example, manufacturers must comply with relevant CGMP validation and recordkeeping requirements and ensure that relevant records are readily available for examination by authorized FDA personnel during an inspection.

A changes-being-effected supplement providing for labeling changes under § 314.70(c)(6)(iii) must include 12 copies of the final printed labeling (§ 314.70(c)(1)). In accordance with

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

§ 314.70(a)(4), an applicant also must promptly revise all promotional labeling and drug advertising to make it consistent with any labeling change implemented in accordance with § 314.70(b) or (c).

Except for supplements providing only for a change in labeling, an applicant must include in each supplement and amendment to a supplement a statement certifying that a field copy has been provided in accordance with 21 CFR 314.440(a)(4)[6] (§ 314.70(a)(5)).

IV. ASSESSING THE EFFECT OF MANUFACTURING CHANGES

A. Assessment of the Effects of the Change

The holder of an approved application under section 505 of the Act ***must assess the effects of the change before distributing a drug product made with a manufacturing change*** (§ 314.70(a)(2)).[7] For each change, the supplement or annual report must contain information determined by FDA to be appropriate and must include the information developed by the applicant in assessing the effects of the change (section 506A(b), (c)(1), (d)(2)(A), and (d)(3)(A) of the Act). The type of information that must be included in a supplemental application or an annual report is specified in § 314.70(b)(3), (c)(4), and (d)(3).

1. Conformance to Specifications

An assessment of the effects of a change on the identity, strength, quality, purity, and potency of the drug product should include a determination that the drug substance intermediates, drug substance, in-process materials, and/or drug product affected by the change conform to the approved specifications.[8] A *specification* is a quality standard (i.e., tests, analytical procedures, and acceptance criteria) provided in an approved application to confirm the quality of drug substances, drug products, intermediates, raw materials, reagents, components, in-process materials, container closure systems, and other materials used in the production of a drug substance or drug product. *Acceptance criteria* are numerical limits, ranges, or other criteria for the tests described (§ 314.3(b)). Conformance to a specification means that the

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[6] Mailing information for field copies is provided in 21 CFR 314.440(a)(4). FDA recommends that the *applicant's home FDA district office* referred to in the regulations be the district office where the applicant's headquarters is located.

[7] *Assess the effects of the change* means to evaluate the effects of a manufacturing change on the identity, strength, quality, purity, and potency of a drug product as these factors relate to the safety or effectiveness of the drug product. The terms *assess* or *assessment* as used in this guidance are not the same as validation. Certain validation information, such as for sterilization processes, is considered information that is needed to assess the effect of the change as specified in § 314.70(a)(2) and should be submitted in an NDA or ANDA. Unless otherwise specified by FDA, validation (e.g., process, equipment) data need not be submitted in the application, but should be retained at the facility and be available for review by FDA at the Agency's discretion under CGMPs.

[8] If a specification needs to be revised as a result of the change, this would be considered a multiple change (see sections VIII and XII).

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material, when tested according to the analytical procedures listed in the specification, will meet the listed acceptance criteria.

2. Additional Testing

In addition to confirming that the material affected by manufacturing changes continues to meet its specification, we recommend that the applicant perform additional testing, when appropriate, to assess whether the identity, strength, quality, purity, or potency of the drug product as these factors may relate to the safety or effectiveness of the drug product have been or will be affected. The assessment should include, as appropriate, evaluation of any changes in the chemical, physical, microbiological, biological, bioavailability, and/or stability profiles. This additional assessment could involve testing of the postchange drug product itself or, if appropriate, the material directly affected by the change. The type of additional testing that an applicant should perform would depend on the type of manufacturing change, the type of drug substance and/or drug product, and the effect of the change on the quality of the drug product. For example:

- Evaluation of changes in the impurity or degradant profile could first involve profiling using appropriate chromatographic techniques and then, depending on the observed changes in the impurity profile, toxicology tests to qualify a new impurity or degradant or to qualify an impurity that is above a previously qualified level.[9]

- Evaluation of the hardness or friability of a tablet after certain changes.

- Assessment of the effect of a change on bioequivalence when required under 21 CFR part 320 could include, for example, multipoint and/or multimedia dissolution profiling and/or an in vivo bioequivalence study.

- Evaluation of extractables from new packaging components or moisture permeability of a new container closure system.

An applicant should refer to all relevant CDER guidance documents for recommendations on the information that should be submitted to support a given change. If guidance for information that should be submitted to support a particular change is not available, applicants can consult the appropriate CDER chemistry or microbiology review staff for advice.

B. Equivalence

When testing is performed, the applicant should usually assess the extent to which the manufacturing change has affected the identity, strength, quality, purity, and potency of the

[9] Recommendations on identifying, qualifying, and reporting impurities can be found in relevant guidances (e.g., ICH Q3B *Impurities in New Drug Products* (November 1996)).

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drug product. Typically this is accomplished by comparing test results from pre- and postchange material and determining if the test results are equivalent. Simply stated: Is the drug product made after the change equivalent to the drug product made before the change? An exception to this general approach is that when bioequivalence is redocumented for certain ANDA postapproval changes, FDA recommends that the comparator be the reference listed drug. Equivalence comparisons frequently have a criterion for comparison with calculation of confidence intervals relative to a predetermined equivalence interval. For this, as well as for other reasons, *equivalent* does not necessarily mean *identical*. Equivalence may also relate to maintenance of a quality characteristic (e.g., stability) rather than a single performance of a test.

C. Adverse Effect

Some manufacturing changes have an adverse effect on the identity, strength, quality, purity, or potency of the drug product. In many cases, the applicant chooses not to implement these manufacturing changes, but sometimes the applicant wishes to do so. If an assessment indicates that a change has adversely affected the identity, strength, quality, purity, or potency of the drug product, FDA recommends that ***the change be submitted in a prior approval supplement regardless of the recommended reporting category for the change.*** For example, a process change recommended for a changes-being-effected-in-30-days supplement could cause the formation of a new degradant that requires qualification and/or identification.[10] The applicant's degradation qualification procedures may indicate that there are no safety concerns relating to the new degradant. Even so, we recommend that the applicant submit this change in a prior approval supplement with appropriate information to support the continued safety and effectiveness of the drug product. During the review of the prior approval supplement, the FDA will assess the impact of any adverse effect on the drug product as this change may relate to the safety or effectiveness of the drug product.

Applicants are encouraged to consult with the appropriate CDER chemistry or microbiology review staff if there are any questions on whether a change in a characteristic would be viewed by CDER as adversely affecting the identity, strength, quality, purity, or potency of the drug product.

V. COMPONENTS AND COMPOSITION

Changes in the qualitative or quantitative formulation, including inactive ingredients, as provided in the approved application, are considered major changes requiring a prior approval supplement, unless exempted by regulation or guidance (§ 314.70(b)(2)(i)). The deletion or reduction of an ingredient intended to affect only the color of the drug product may be reported in an annual report (§ 314.70(d)(2)(ii)). Guidance on changes in components and composition that may be submitted in a changes-being-effected supplement or annual report is not included in this document because

[10] Recommendations on identifying, qualifying, and reporting impurities can be found in relevant guidances.

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of the complexity of the recommendations, but may be covered in one or more guidance documents describing postapproval changes (e.g., SUPAC documents).

VI. MANUFACTURING SITES[11]

A. General Considerations

CDER must be notified when a manufacturer changes to a manufacturing site that is different from those specified in the approved application (314.70(a)). Sites can include those used by an applicant to (1) manufacture or process drug products,[12] in-process materials, drug substances, or drug substance intermediates, (2) package drug products, (3) label drug products, and (4) test components, drug product containers, closures, packaging materials, in-process materials, or drug products. Sites include those owned by the applicant or contract sites used by an applicant. Testing sites include those performing physical, chemical, biological, and microbiological testing to monitor, accept, or reject materials, as well as those performing stability testing. Sites used to label drug products are considered those that perform labeling of the drug product's primary or secondary packaging components. Sites performing operations that place identifying information on the dosage form itself (e.g., ink imprint on a filled capsule) are considered to be facilities that manufacture or process the drug product. FDA recommends that the supplement or annual report identify whether the proposed manufacturing site is an alternative to or replacement for the site or sites provided for in the approved application.

FDA recommends that a move to a different manufacturing site, when it is a type of site routinely subject to FDA inspection, be submitted as a prior approval supplement if the site does not have a ***satisfactory CGMP inspection***[13] for the ***type of operation***[14] being moved (see sections VI.B.1 and 2).

For labeling, secondary packaging, and testing site changes, the potential for adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product is considered to be independent of the type of drug product dosage form or specific type of operation being performed. Therefore, the recommended reporting category for any one of these manufacturing site changes will be the same for all types of drug products and operations. For manufacturing sites used to (1) manufacture or process drug products, in-process materials, drug substances, or drug substance intermediates or (2) perform primary packaging operations,

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[11] See Attachment A for a discussion of the definition of *same manufacturing site* and *different manufacturing site.*

[12] Manufacturing or processing drug product would also include the preparation (e.g., sterilization, depyrogenation, irradiation, washing) by the applicant or applicant's contractor of container closure systems or packaging components. Changes in the site used to fabricate packaging components (e.g., bottles) or manufacture packaging materials (e.g., resins) need not be reported to CDER if there are no other changes (e.g., dimensions, compositions, processing aids). If other changes occur, the reporting category should be based on the recommended reporting categories for these changes (i.e., the manufacturing site change does not need to be considered when determining the appropriate reporting category).

[13] See Glossary for a definition of *satisfactory CGMP inspection*.

[14] See Attachment B for a discussion of the term *type of operation*.

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the potential for adverse effect depends on factors such as the type of drug substance or drug product and operation being performed. Therefore, recommended reporting categories may differ depending on the type of drug product and operations.

Except for the situations described in sections VI.B.4, VI.C.1.b, and VI.D.5, construction activities at a manufacturing site or moving production operations within a building or between buildings at the same manufacturing site do not have to be reported to CDER.

We recommend that a move to a manufacturing site that involves other changes (e.g., process, equipment) be evaluated as a multiple related change (see section XII) to determine the appropriate reporting category.

B. Major Changes (Prior Approval Supplement)

The following are examples of changes considered to have a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. A move to a different manufacturing site, except one used to manufacture or process a drug substance intermediate, when the new manufacturing site has never been inspected by FDA for the type of operation that is being moved or the move results in a restart at the new manufacturing site of a type of operation that has been discontinued for more than two years.

2. A move to a different manufacturing site, except one used to manufacture or process a drug substance intermediate, when the new manufacturing site does not have a satisfactory CGMP inspection for the type of operation being moved.

3. A move to a different manufacturing site for (1) the manufacture, processing, or primary packaging of drug products when the primary packaging components control the dose delivered to the patient or the formulation modifies the rate or extent of availability of the drug, or (2) the manufacture or processing of in-process materials with modified-release characteristics. Examples of these types of drug products include modified-release solid oral dosage forms,[15] transdermal systems, liposomal drug products, depot drug products, oral and nasal metered-dose inhalers (MDIs), dry powder inhalers (DPIs), and nasal spray pumps.

4. Transfer of the manufacture of an aseptically processed sterile drug substance or aseptically processed sterile drug product to (1) a newly constructed or refurbished aseptic processing facility or area or (2) an existing aseptic processing facility or area that does not manufacture similar (including container types and sizes) approved drug products. An example

[15] Certain operations relating to the manufacture, processing, or primary packaging of modified-release solid oral dosage form drug products need not be reported in a prior approval supplement (see sections VI.C.1.c and VI.D.6).

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would be transferring the manufacture of a lyophilized drug product to an existing aseptic process area where no approved lyophilized drug products are manufactured or where the approved lyophilized drug products being manufactured have different container types and/or sizes than the container of the drug product being transferred. See section VI.C.1.b for recommendations for other manufacturing site changes relating to aseptically processed sterile drug substance or aseptically processed sterile drug product.

5. Transfer of the manufacture of a finished drug product sterilized by terminal processes to a newly constructed facility at a different manufacturing site. Once this change has been approved, subsequent site changes to the facility for similar drug product types and processes may be submitted as a changes-being-effected-in-30-days supplement (see section VI.C.1.a).

C. Moderate Changes (Supplement - Changes Being Effected)

The following are examples of changes considered to have a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product. If the new site does not have a satisfactory CGMP inspection for the type of operation being moved (see sections VI.B.1 and 2), then FDA recommends that the changes listed below (excluding changes relating to drug substance intermediate manufacturing sites) be submitted in a prior approval supplement.

1. Supplement - Changes Being Effected in 30 Days

a. A move to a different manufacturing site for the manufacture or processing of any drug product, in-process material, or drug substance that is not otherwise provided for in this guidance.

b. For aseptically processed sterile drug substance or aseptically processed sterile drug product, a move to an aseptic processing facility or area at the same or different manufacturing site except as provided for in section VI.B.4.

c. A move to a different manufacturing site for the primary packaging of (1) any drug product that is not otherwise listed as a major change and (2) modified-release solid oral dosage form drug products.

d. A move to a different manufacturing site for testing if (1) the test procedures approved in the application or procedures that have been implemented via an annual report are used, (2) all postapproval commitments made by the applicant relating to the test procedures have been fulfilled (e.g., providing methods validation

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samples), and (3) the new testing facility has the capability to perform the intended testing.

2. Supplement - Changes Being Effected

A move to a different manufacturing site for the manufacture or processing of the final intermediate.

D. Minor Changes (Annual Report)

The following are examples of changes considered to have a minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product. If the new site does not have a satisfactory CGMP inspection for the type of operation being moved, then FDA recommends that the changes listed below (excluding changes relating to drug substance intermediate manufacturing sites) be submitted in a prior approval supplement (see sections VI.B.1 and 2).

1. A move to a different manufacturing site for secondary packaging.

2. A move to a different manufacturing site for labeling.

3. A move to a different manufacturing site for the manufacture or processing of drug substance intermediates other than the final intermediate.

4. A change in the contract sterilization site for packaging components when the process is not materially different from that provided for in the approved application

5. A transfer of the manufacture of a finished product sterilized by terminal processes to a newly constructed building or existing building at the same manufacturing site.

6. A move to a different manufacturing site for the ink imprinting of solid oral dosage form drug products.

VII. MANUFACTURING PROCESS

A. General Considerations

The potential for adverse effects on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product depends on the type of manufacturing process and the changes being instituted for the drug substance or drug product. In some cases, there may be a substantial potential for adverse effect regardless of direct testing of the drug substance or drug product for conformance with the approved specification. When there is a substantial potential for adverse effects, a change must be submitted in a prior approval supplement (section 506A(c) of the Act).

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B. Major Changes (Prior Approval Supplement)

The following are examples of changes considered to have a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Changes that may affect the controlled (or modified) release, metering or other characteristics (e.g., particle size) of the dose delivered to the patient, including the addition or deletion of a code imprint by embossing, debossing, or engraving on a modified-release solid oral dosage form.

2. Changes that may affect drug product sterility assurance including, where appropriate, process changes for sterile drug substances and sterile packaging components. These include:

   - Changes in the sterilization method (e.g., gas, dry heat, irradiation). These include changes from sterile filtered or aseptic processing to terminal sterilization, or vice versa.
   - Addition, deletion, or substitution of sterilization steps or procedures for handling sterile materials in an aseptic processing operation.
   - Replacing sterilizers that operate by one set of principles with sterilizers that operate by another principle (e.g., substituting a gravity displacement steam process with a process using superheated water spray).
   - Addition to an aseptic processing line of new equipment made of different materials (e.g., stainless steel versus glass, changes between plastics) that will come in contact with sterilized bulk solution or sterile drug components, or deletion of equipment from an aseptic processing line.
   - Replacing a Class 100 aseptic fill area with a barrier system or isolator for aseptic filling. Once this change has been approved, subsequent process changes for similar product types in the same barrier system or isolator may be submitted as a changes-being-effected-in-30-days supplement.
   - Replacement or addition of lyophilization equipment of a different size that uses different operating parameters or lengthens the overall process time.
   - Changes from bioburden-based terminal sterilization to the use of an overkill process, and vice versa.
   - Changes to aseptic processing methods, including scale, that extend the total processing, including bulk storage time, by more than 50 percent beyond the validated limits in the approved application.
   - Changes in sterilizer load configurations that are outside the range of previously validated loads.

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- Changes in materials or pore size rating of filters used in aseptic processing.

3. The following changes for a natural product:[16]

- Changes in the virus or adventitious agent removal or inactivation methods. This applies to any material where such procedures are necessary, including drug substance, drug product, reagents, and excipients.
- For drug substance and drug product, changes in the source material (e.g., microorganism, plant) or cell line.
- For drug substance and drug product, establishment of a new master cell bank or seed.

4. Any fundamental change in the manufacturing process or technology from that currently used by the applicant. For example:

a. Drug product

- Dry to wet granulation or vice versa.
- Change from one type of drying process to another (e.g., oven tray, fluid bed, microwave).

b. Drug substance

- Filtration to centrifugation or vice versa.
- Change in the route of synthesis of a drug substance.

5. The following changes for drug substance

- Any process change made after the final intermediate processing step in drug substance manufacture.

- Changes in the synthesis or manufacture of the drug substance that may affect its impurity profile and/or the physical, chemical, or biological properties.

6. Addition of an ink code imprint or change to or in the ink used for an existing imprint code for a solid oral dosage form drug product when the ink as changed is not currently used on ***CDER-approved drug products***.[17]

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[16] For the purposes of this guidance, *natural product* refers to materials (e.g., drug substance, excipients) that are derived from plants, animals, or microorganisms, and that are subject to approval under section 505 of the Act. The specific recommendations for natural products are not applicable to inorganic compounds (e.g., salts, minerals).

[17] See Attachment C for a discussion of *CDER-approved drug products.*

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7. Establishing a new procedure for reprocessing a batch of drug substance or drug product that fails to meet the approved specification.

C. Moderate Changes (Supplement - Changes Being Effected)

The following are examples of changes considered to have a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Supplement - Changes Being Effected in 30 Days

a. For drug products, any change in the process, process parameters, and/or equipment except as otherwise provided for in this guidance.

b. For drug substances, any change in process and/or process parameters except as otherwise provided for in this guidance.

c. For natural protein drug substances and natural protein drug products:

- Any change in the process, process parameters, and/or equipment except as otherwise provided for in this guidance (e.g., section VII.B.5, VII.D.7).
- An increase or decrease in production scale during finishing steps that involves different equipment.
- Replacement of equipment with equipment of different design that does not affect the process methodology or process operating parameters.

d. For sterile drug products, drug substances, and components, as appropriate:

- Changes in dry heat depyrogenation processes for glass container systems for drug substances and drug products that are produced by terminal sterilization processes or aseptic processing.
- Changes to filtration parameters for aseptic processing (including flow rate, pressure, time, or volume, but not filter materials or pore size rating) when additional validation studies for the new parameters should be performed.
- Filtration process changes that provide for a change from single to dual sterilizing filters in series, or for repeated filtration of a bulk.

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- Changes from one qualified sterilization chamber to another for in-process or terminal sterilization that result in changes to validated operating parameters (time, temperature, F_0, and others).
- Changes in scale of manufacturing for terminally sterilized drug products that increase the bulk solution storage time by more than 50 percent beyond the validated limits in the approved application when bioburden limits are unchanged.

e. For drug substances, redefinition of an intermediate, excluding the final intermediate, as a starting material.

2. Supplement - Changes Being Effected

a. A change in methods or controls that provides increased assurance that the drug substance or drug product will have the characteristics of identity, strength, quality, purity, or potency that it purports or is represented to possess.

b. For sterile drug products, elimination of in-process filtration performed as part of the manufacture of a terminally sterilized drug product.

D. Minor Changes (Annual Report)

The following are examples of changes considered to have a minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. For drug products, changes to equipment of the same design and operating principle and/or changes in scale except as otherwise provided for in this guidance (e.g., section VII.C.1.c, VII.D.7).

2. A minor change in an existing code imprint for a dosage form. For example, changing from a numeric to alphanumeric code.

3. Addition of an ink code imprint or a change in the ink used in an existing code imprint for a solid oral dosage form drug product when the ink is currently used on CDER-approved drug products.

4. Addition or deletion of a code imprint by embossing, debossing, or engraving on a solid dosage form drug product other than a modified-release dosage form.

5. A change in the order of addition of ingredients for solution dosage forms or solutions used in unit operations (e.g., granulation solutions).

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6. Changes in scale of manufacturing for terminally sterilized drug products that increase the bulk solution storage time by no more than 50 percent beyond the validated limits in the approved application when bioburden limits are unchanged.

7. For natural protein drug products and natural protein drug substances:

   - An increase or decrease in production scale during finishing steps that does not involve an equipment change.
   - Replacement of equipment with equipment of the same design, operating principle, and capacity with no change in production scale.

VIII. SPECIFICATIONS

A. General Considerations

All changes in specifications from those in the approved application must be submitted in a prior approval supplement unless otherwise exempted by regulation or guidance (§ 314.70(b)(2)(i)). *Specifications* (i.e., tests, analytical procedures, and acceptance criteria) are the quality standards provided in an approved application to confirm the quality of drug substances, drug products, intermediates, raw materials, reagents, components, in-process materials, container closure systems, and other materials used in the production of a drug substance or drug product. For the purpose of defining specifications, *acceptance criteria* are numerical limits, ranges, or other criteria for the tests described. Examples of a test, an analytical procedure, and an acceptance criterion are, respectively, an assay, a specific, fully described high pressure liquid chromatography (HPLC) procedure, and a range of 98.0–102.0 percent. The recommendations in this section also apply to specifications associated with sterility assurance that are included in NDA and ANDA submissions.[18]

A *regulatory* analytical procedure is the procedure in the approved application that is designated for use in evaluating a defined characteristic of the drug substance or drug product. Section 501(b) of the Act recognizes the analytical procedures in the *U.S. Pharmacopeia/National Formulary* (USP/NF) as the regulatory analytical procedures for compendial items. Tests and associated acceptance criteria and regulatory analytical procedures in addition to those specified in the USP/NF may be required for approving compendial items (section 505 of the Act).

The applicant may include in its application *alternatives* to the approved regulatory analytical procedures for testing the drug substance and drug product. However, for purposes of determining compliance with the Act, regulatory analytical procedures are used.

[18] See FDA guidance for industry on the *Submission of Documentation for Sterilization Process Validation in Applications for Human and Veterinary Drug Products* (November 1994).

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In sections B through D below, the use of the term *analytical procedure* without a qualifier such as *regulatory* or *alternative* refers to an analytical procedure used to test materials other than the drug substance or drug product.

B. Major Changes (Prior Approval Supplement)

The following are examples of changes in specifications considered to have a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Relaxing an acceptance criterion except as otherwise provided for in this guidance (e.g., section VIII.C.1.b, VIII.C.1.e).

2. Deleting any part of a specification except as otherwise provided for in this guidance (e.g., section VIII.D.2).

3. Establishing a new regulatory analytical procedure including designation of an alternative analytical procedure as a regulatory procedure.

4. A change in a regulatory analytical procedure that does not provide the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the regulatory analytical procedure described in the approved application.

5. A change in an analytical procedure used for testing components, packaging components, the final intermediate, in-process materials after the final intermediate, or starting materials introduced after the final intermediate that does not provide the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application except as otherwise noted. For example, a change from an HPLC procedure that distinguishes impurities to (1) an HPLC procedure that does not, (2) another type of analytical procedure (e.g., titrimetric) that does not, or (3) an HPLC procedure that distinguishes impurities but the limit of detection and/or limit of quantitation is higher.

6. Relating to testing of raw materials for viruses or adventitious agents:[19] (1) relaxing an acceptance criterion, (2) deleting a test, or (3) a change in the analytical procedure that does not provide the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application.

[19] In this context, testing for adventitious agents is not considered to include tests that are found in an official compendium (e.g., USP <61>).

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C. Moderate Changes (Supplement - Changes Being Effected)

The following are examples of changes in specifications considered to have a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Supplement - Changes Being Effected in 30 Days

a. Any change in a regulatory analytical procedure other than those identified as major changes or editorial changes.

b. Relaxing an acceptance criterion or deleting a test for raw materials used in drug substance manufacturing, in-process materials prior to the final intermediate, starting materials introduced prior to the final drug substance intermediate, or drug substance intermediates (excluding final intermediate) except as provided for in section VIII.B.6.

c. A change in an analytical procedure used for testing raw materials used in drug substance manufacturing, in-process materials prior to the intermediate, starting materials introduced prior to the final drug substance intermediate, or drug substance intermediates (excluding final intermediate) that does not provide the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application except as provided for in section VIII.B.6.

d. Relaxing an in-process acceptance criterion associated with microbiological monitoring of the production environment, materials, and components that are included in NDA and ANDA submissions. For example, increasing the microbiological alert or action limits for critical processing environments in an aseptic fill facility or increasing the acceptance limit for bioburden in bulk solution intended for filtration and aseptic filling.

e. Relaxing an acceptance criterion or deleting a test to comply with an official compendium that is consistent with FDA statutory and regulatory requirements (§ 314.70(c)(2)(iii)).

2. Supplement - Changes Being Effected

a. An addition to a specification that provides increased assurance that the drug substance or drug product will have the characteristics of identity, strength, quality, purity, or potency that it purports or is represented to possess. For example, adding a new test and associated analytical procedure and acceptance criterion.

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b. A change in an analytical procedure used for testing components, packaging components, the final intermediate, in-process materials after the final intermediate, or starting materials introduced after the final intermediate that provides the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application.

D. Minor Changes (Annual Report)

The following are examples of changes in specifications considered to have a minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Any change in a specification made to comply with an official compendium, except the changes described in section VIII.C.1.e, that is consistent with FDA statutory and regulatory requirements (§ 314.70(d)(2)(i)).

2. For drug substance and drug product, the addition or revision of an alternative analytical procedure that provides the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application or deletion of an alternative analytical procedure.

3. Tightening of acceptance criteria.

4. A change in an analytical procedure used for testing raw materials used in drug substance synthesis, starting materials introduced prior to the final drug substance intermediate, in-process materials prior to the final intermediate, or drug substance intermediates (excluding final intermediate) that provides the same or increased assurance of the identity, strength, quality, purity, or potency of the material being tested as the analytical procedure described in the approved application.

IX. CONTAINER CLOSURE SYSTEM

A. General Considerations

The potential for adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product when making a change to or in the container closure system is generally dependent on the route of administration of the drug product, performance of the container closure system, and the likelihood of interaction between the packaging component and the dosage form. In some cases there may be a substantial potential for adverse effect, regardless of direct drug product testing for conformance with the approved specification.

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A change to or in a packaging component will often result in a new or revised specification for the packaging component. This situation does not have to be considered a multiple related change. Only the reporting category for the packaging change needs to be considered.

B. Major Changes (Prior Approval Supplement)

The following are examples of changes considered to have a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. For liquid (e.g., solution, suspension, elixir) and semisolid (e.g., creams, ointments) dosage forms, a change to or in polymeric materials (e.g., plastic, rubber) of primary packaging components, when the composition of the component as changed has never been used in a CDER-approved drug product of the same dosage form and same route of administration. For example, a polymeric material that has been used in a CDER-approved topical ointment would not be considered CDER-approved for an ophthalmic ointment.

2. For liquid (e.g., solution, suspension, elixir) and semisolid (e.g., creams, ointments) dosage forms in permeable or semipermeable container closure systems, a change from an ink and/or adhesive used on the permeable or semipermeable packaging component to an ink or adhesive that has never been used in a CDER-approved drug product of the same dosage form and same route of administration ***and*** with the same type of permeable or semipermeable packaging component (e.g., low density polyethylene, polyvinyl chloride).

3. A change in the primary packaging components for any drug product when the primary packaging components control[20] the dose delivered to the patient (e.g., the valve or actuator of a metered-dose inhaler).

4. For sterile drug products, any change that may affect drug product sterility assurance, such as:[21]

    - A change from a glass ampule to a glass vial with an elastomeric closure.

[20] A container closure system that is considered to control the dose delivered to the patient is a container closure system where the system itself, rather than a person, regulates the amount of drug product ultimately delivered to a patient. A container closure system where a person controls the amount of drug product administered or that allows verification that the appropriate amount has been administered (e.g., number of tablets, milliliters of liquid) is not considered a container closure system that controls the dose delivered to the patient.

[21] Some of these identified changes, depending on the circumstances, may have to be submitted as original NDAs or ANDAs instead of as supplements. Applicants can consult the appropriate CDER chemistry division/office if there are questions.

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- A change to a flexible container system (bag) from another container system.
- A change to a prefilled syringe dosage form from another container system.
- A change from a single unit dose container to a multiple dose container system.
- Changes that add or delete silicone treatments to container closure systems (such as elastomeric closures or syringe barrels).
- Changes in the size and/or shape of a container for a sterile drug product.

5. Deletion of a secondary packaging component intended to provide additional protection to the drug product (e.g., carton to protect from light, overwrap to limit transmission of moisture or gases) or a change in the composition of, or the addition of, a secondary packaging component that may affect the impurity profile of the drug product.

6. A change to a new container closure system if the new container closure system does not provide the same or better protective properties than the approved container closure system.

C. Moderate Changes (Supplement - Changes Being Effected)

The following are examples of changes considered to have a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Supplement - Changes Being Effected in 30 Days

a. A change to or in a container closure system, except as otherwise provided for in this guidance, that does not affect the quality of the drug product.

b. Changes in the size or shape of a container for a sterile drug substance.

c. A change in the number of units (e.g., tablets, capsules) or labeled amount (e.g., grams, milliliters) of a nonsterile drug product in a unit-of-use container.[22]

2. Supplement - Changes Being Effected

[22] A unit-of-use container is one that contains a specific quantity of a drug product and is intended to be dispensed to the patient without further modification except for the addition of appropriate labeling.

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a. A change in the size and/or shape of a container for a nonsterile drug product, except for solid dosage forms (see section IX.D.2), without a change from one container closure system to another (§ 314.70(c)(6)(ii)).

b. A change in the labeled amount (e.g., grams, milliliters) of drug product for a nonsterile drug product in a multiple-unit container,[23] except for solid dosage forms (see section IX.D.3) .

c. A change in or addition or deletion of a desiccant.

D. Minor Changes (Annual Report)

The following are examples of changes considered to have a minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. A change in the container closure system for a nonsterile drug product, based on a showing of equivalency to the approved system under a protocol approved in the application or published in an official compendium (§ 314.70(d)(2)(v)).

2. A change in the size and/or shape of a container for a nonsterile solid dosage form (§ 314.70(d)(2)(iv)).

3. A change in the number of units (e.g., tablets, capsules) or labeled amount (e.g., grams) of nonsterile solid dosage form in a multiple-unit container.

4. The following changes in the container closure system of solid oral dosage form drug products as long as the new package provides the same or better protective properties (e.g., light, moisture) and any new primary packaging component materials have been used in and been in contact with CDER-approved solid oral dosage form drug products:[24]

   - Adding or changing a child-resistant closure, changing from a metal to plastic screw cap, or changing from a plastic to metal screw cap.

[23] A multiple-unit container is a container that permits withdrawal of successive portions of the contents without changing the strength, quality, or purity of the remaining portion. This type of container is not distributed directly to patients but is used by health care practitioners who dispense the drug product in smaller amounts to a patient in accordance with a physician's instructions.

[24] For sections IX.D.4 to IX.D.7, changes in the container closure system that result in drug product contact with a component material that has never been used in any CDER-approved drug product of the same type should be submitted as a changes-being-effected-in-30-days supplement (section IX.C.1) or prior approval supplement (section IX.B.1).

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- Changing from one plastic container to another of the same type of plastic (e.g., high density polyethylene (HDPE) container to another HDPE container).
- Changes in packaging materials used to control odor (e.g., charcoal packets).
- Changes in bottle filler (e.g., change in weight of cotton or amount used) without changes in the type of filler (e.g., cotton to rayon).
- Increasing the wall thickness of the container.
- A change in or addition of a cap liner.
- A change in or addition of a seal (e.g., heat induction seal).
- A change in an antioxidant, colorant, stabilizer, or mold releasing agent for production of the container and/or closure to one that is used at similar levels in the packaging of CDER-approved solid oral dosage form drug products.
- A change to a new container closure system when the container closure system is already approved in the NDA or ANDA for other strengths of the drug product.

5. The following changes in the container closure system of nonsterile liquid drug products as long as the new package provides the same or better protective properties and any new primary packaging component materials have been used in and been in contact with CDER-approved liquid drug products with the same route of administration (i.e., the material in contact with a liquid topical should already have been used with other CDER-approved liquid topical drug products):

   - Adding or changing a child-resistant closure, changing from a metal to plastic screw cap, or changing from a plastic to metal screw cap.
   - Increasing the wall thickness of the container.
   - A change in or addition of a cap liner.
   - A change in or addition of a seal (e.g., heat induction seal).

6. A change in the container closure system of unit dose packaging (e.g., blister packs) for nonsterile solid dosage form drug products as long as the new package provides the same or better protective properties and any new primary packaging component materials have been used in and been in contact with CDER-approved drug products of the same type (e.g., solid oral dosage form, rectal suppository).

7. The following changes in the container closure system of nonsterile semisolid drug products as long as the new package provides the same or

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better protective properties and any new primary packaging component materials have been used in and been in contact with CDER-approved semisolid drug products:

- Changes in the closure or cap.
- Increasing the wall thickness of the container.
- A change in or addition of a cap liner.
- A change in or addition of a seal.
- A change in the crimp sealant.

8. A change in the flip seal cap color as long as the cap color is consistent with any established color coding system for that class of drug products.

X. LABELING

A. General Considerations

A drug product labeling change includes changes in the package insert, package labeling, or container label. In accordance with § 314.70(a)(4), an applicant must promptly revise all promotional labeling and drug advertising to make it consistent with any labeling change implemented in accordance with paragraphs (b) or (c) of § 314.70. All labeling changes for ANDA drug products must be consistent with section 505(j) of the Act.

B. Major Changes (Prior Approval Supplement)

Any proposed change in the labeling, except changes designated as moderate or minor by regulation or guidance, must be submitted as a prior approval supplement (§ 314.70(b)(2)(v)(A)). If applicable, any change to a Medication Guide required under 21 CFR part 208, except for changes in the information specified in § 208.20(b)(8)(iii) and (b)(8)(iv), must be submitted in a prior approval supplement (§ 314.70(b)(v)(B)). The following list contains some examples of changes currently considered by CDER to fall into this reporting category.

1. Changes based on postmarketing study results, including, but not limited to, labeling changes associated with new indications and usage.

2. Change in, or addition of, pharmacoeconomic claims based on clinical studies.

3. Changes to the clinical pharmacology or the clinical study section reflecting new or modified data.

4. Changes based on data from preclinical studies.

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5. Revision (expansion or contraction) of population based on data.

6. Claims of superiority to another drug product.

7. Change in the labeled storage conditions, unless exempted by regulation or guidance.

C. Moderate Changes (Supplement - Changes Being Effected)

Under § 314.70(c)(6)(iii), a changes-being-effected supplement must be submitted for any labeling change that (1) adds or strengthens a contraindication, warning, precaution, or adverse reaction, (2) adds or strengthens a statement about drug abuse, dependence,

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psychological effect, or overdosage, (3) adds or strengthens an instruction about dosage and administration that is intended to increase the safe use of the drug product, (4) deletes false, misleading, or unsupported indications for use or claims for effectiveness, or (5) normally requires a supplement submission and approval prior to distribution of the drug product that FDA specifically requests be submitted under this provision. A changes-being-effected supplement that provides for a labeling change under §§ 314.70(c)(6)(iii) must include 12 copies of final printed labeling (§ 314.70(c)(1)). The following list includes some examples of changes currently considered by CDER to fall into this reporting category.

1. Addition of an adverse event due to information reported to the applicant or Agency.

2. Addition of a precaution arising out of a postmarketing study.

3. Clarification of the administration statement to ensure proper administration of the drug product.

D. Minor Changes (Annual Report)

Labeling with editorial or similar minor changes or with a change in the information concerning the description of the drug product or information about how the drug is supplied that does not involve a change in the dosage strength or dosage form should be described in an annual report (§ 314.70(d)(2)(ix) and (d)((2)(x)) . The following list includes some examples currently considered by CDER to fall into this reporting category.

1. Changes in the layout of the package or container label that are consistent with FDA regulations (e.g., 21 CFR part 201) without a change in the content of the labeling.

2. Editorial changes, such as adding a distributor's name.

3. Foreign language versions of the labeling if no change is made to the content of the approved labeling and a certified translation is included.

4. Labeling changes made to comply with an official compendium.

XI. MISCELLANEOUS CHANGES

A. Major Changes (Prior Approval Supplement)

The following are examples of changes considered to have a substantial potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

1. Changes requiring completion of studies in accordance with 21 CFR part 320 to demonstrate equivalence of the drug product to the drug product as manufactured without the change or to the reference listed drug (§ 314.70(b)(2)(ii)).

2. Addition of a stability protocol or comparability protocol.

3. Changes to an approved stability protocol or comparability protocol unless otherwise provided for in this guidance (e.g., VIII.C, VIII.D, XI.C.2).

4. An extension of an expiration dating period based on (1) data obtained under a new or revised stability testing protocol that has not been approved in the application or (2) full shelf life data on pilot scale batches using an approved protocol.

5. Changes to a drug product under an application that is subject to a validity assessment because of significant questions regarding the integrity of the data supporting that application (§ 314.70(b)(2)(viii)).

B. Moderate Changes (Supplement - Changes Being Effected)

The following are examples of changes considered to have a moderate potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. Supplement - Changes Being Effected in 30 Days

Reduction of an expiration dating period to provide increased assurance of the identity, strength, quality, purity, or potency of the drug product. Extension of an expiration date that has previously been reduced under this provision should be submitted in a changes-being-effected-in-30-days supplement even if the extension is based on data obtained under a protocol approved in the application.

2. Supplement - Changes Being Effected

No changes have been identified.

C. Minor Changes (Annual Report)

The following are examples of changes considered to have a minimal potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product.

1. An extension of an expiration dating period based on full shelf life data on production batches obtained under a protocol approved in the application (§ 314.70(d)(2)(vi)).

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2. Addition of time points to the stability protocol or deletion of time points beyond the approved expiration dating period.

3. A change from previously approved stability storage conditions to storage conditions recommended in International Conference on Harmonisation (ICH) guidances.

4. Non-USP reference standards:

   - Replacement of an in-house reference standard or reference panel (or panel member) according to procedures in an approved application.
   - Tightening of acceptance criteria for existing reference standards to provide greater assurance of drug product purity and potency.

XII. MULTIPLE RELATED CHANGES

Multiple related changes involve various combinations of individual changes. For example, a site change may also involve equipment and manufacturing process changes or a components and composition change may necessitate a change in a specification. For multiple related changes where the recommended reporting categories for the individual changes differ, CDER recommends that the submission be in accordance with the most restrictive of the categories recommended for the individual changes. When the multiple related changes all have the same recommended reporting category, CDER recommends that the submission be in accordance with the reporting category for the individual changes.

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*Contains Nonbinding Recommendations**

ATTACHMENT A: MANUFACTURING SITES

All owners or operators of all drug establishments (not exempt by regulation) that engage in the manufacture, preparation, propagation, compounding, or processing of a drug or drugs are required to register with the FDA (21 CFR 207.20). An *establishment* means a place of business under one management at one general physical location (§ 207.3(a)(7)). A *general physical location* is reasonably construed to include separate buildings within the same city ***if*** the activities in the buildings are closely related to the same business enterprise, are under the supervision of the same local management, and are all inspected at the same time (ORA Field Management Directive No. 132).

For the purposes of determining the reporting category for moves between buildings, the terms *same manufacturing site* and *different manufacturing site* mean:

Domestic Establishments

Same manufacturing site:

- The new and old buildings are included under the same drug establishment registration number[25]

  and

- The same FDA district office is responsible for inspecting the operations in both the new and old buildings.

Different manufacturing site:

- The new and old buildings have different drug establishment registration numbers

  or

- Different FDA district offices are responsible for inspecting operations in the new and old buildings.

For domestic establishments, the terms *same manufacturing site* and *different manufacturing site* supersede the terms *contiguous campus*, *same campus*, and *different campus* as used in the SUPAC guidances.

Foreign Establishments

[25] The registration number is the number assigned to the establishment as part of the registration process (e.g., ORA Field Management Directive No. 92).

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Foreign establishments are not currently required to register with the FDA. On May 14, 1999, FDA published a proposed rule to require registration of foreign establishments (64 FR 26330). Until registration of foreign establishments is required, same and different manufacturing sites mean:

Same manufacturing site:

- A contiguous or unbroken site or a set of buildings in adjacent city blocks.

Different manufacturing site:

- The new and old buildings are not on a contiguous site or not in adjacent city blocks.

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*Contains Nonbinding Recommendations**

ATTACHMENT B: TYPE OF OPERATION AND CGMP INSPECTIONS

Section VI states that a change to a different manufacturing site should be submitted in a prior approval supplement when (1) the new manufacturing site has never been inspected by FDA for the type of operation being moved, (2) the move results in a restart at the new manufacturing site of a type of operation that has been discontinued for more than two years, or (3) the new manufacturing site does not have a satisfactory current good manufacturing practice (CGMP) inspection for the type of operation being moved.

A *profile class system* is used by FDA to assist in (1) managing the CGMP inspection process, (2) evaluating the findings and the compliance follow-up needed, and (3) communicating the results of inspections. A profile class can relate to the manufacture of a particular dosage form (e.g., large volume parenterals, oral liquids), type of drug substance (e.g., sterile bulk by chemical synthesis), or specific function performed at a site (e.g., control testing laboratory). There are profile class codes for major categories of drug substance processes, dosage forms, and manufacturing functions (see table below). However, the system is not comprehensive for all operations performed in the pharmaceutical industry (see not elsewhere classified (NEC) profile class code).

The term *type of operation* refers to the specialized or even unique conditions and practices that are employed to manufacture a class or category of drug substance or drug product or to perform a limited segment of the manufacturing process. These conditions and practices exist and are performed within the framework of CGMPs, along with general conditions and practices that contribute to the manufacture of all drug products at a given manufacturing site. The conditions and practices, both general and specific, are inspected to evaluate the CGMP acceptability of a manufacturing site. A wide variety of classes or categories of drug substances and drug products may be produced at a manufacturing site, or the manufacturing site may only produce a single class of drug substance and/or drug product or perform a limited segment of a manufacturing process. Each type of operation is represented by a ***profile class code.***

Generally, a satisfactory CGMP status for a profile class code is used to communicate a satisfactory CGMP clearance for all of the products and for all of the operations included within the category that code represents. Thus the profile class code for a particular dosage form or type of drug substance is used to communicate the CGMP status for all aspects of manufacturing, processing, packing, or holding that are performed at the specific manufacturing site relating to that particular dosage form or type of drug substance, including packaging and labeling operations, testing, and quality control. The profile class code for a particular dosage form or type of drug substance is also used to communicate the CGMP status for manufacturing sites that produce in-process material (e.g., controlled-release beads), package drug products, or label drug products, even if these are stand-alone (e.g., contractor) operations.

A few profile class codes that describe certain types of operations (see items in boldface in table) are provided to report the CGMP status for contractor firms whose only function in the manufacturing process is to perform this operation. If one of these operations (e.g., steam sterilization process) is performed at the manufacturing site involved in producing the drug product/drug substance, the CGMP status for that operation is reported as part of the profile class code for the particular dosage form or type of drug substance. For example, a manufacturing site

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producing a terminally sterilized small volume parenteral drug product would be reported with the profile class code for the dosage form (SVT), not by the profile code for the sterilization process (SSP).

Certain inspections may be required by program priorities even if the rating for a profile class code indicates an acceptable CGMP status. The current profile codes/classes for human drugs are:

ADM	Aerosol dispensed medication	NEC	Not elsewhere classified (when using this class, specific drug products are noted)
CBI	Biotechnology crude drug	OIN	Ointment, nonsterile (includes cream, jelly, paste)
CEX	Plant/animal extraction crude drug	POW	Powders (includes oral and topical)
CFS	Sterile bulk by fermentation crude drug	RAD	Radiopharmaceutical
CFN	Nonsterile bulk by fermentation crude drug	**RSP**	**Radiation sterilization process**
CHG	Capsule, prompt release	SNI	Sterile noninjectable
CRU	Crude bulk drugs-nonsynthesized	SOP	Soap
CSG	Capsules, soft gelatin	**SSP**	**Steam sterilization process**
CSN	Nonsterile bulk by chemical synthesis	SUP	Suppositories
CSP	**Chemical sterilization process**	SVL	Small volume parenterals (lyophilized)
CSS	Sterile bulk by chemical synthesis	SVS	Sterile-filled small volume parenterals
CTL	**Control testing laboratories**	SVT	Terminally sterilized small volume parenteral
CTR	Capsules, modified-release	TCM	Tablets, prompt-release
GAS	Medical gas (includes liquid oxygen and other)	TCT	Tablets, delayed-release
GSP	**Gas sterilization process**	TDP	Transdermal patches
HSP	**Dry heat sterilization process**	**TSP**	**Fractional (tyndallization) sterilization process**
LIQ	Liquid (includes solutions, suspension, elixirs, and tinctures)	TTR	Tablets, extended-release
LVP	Large volume parenterals	**WSP**	**Water sterilization process**

CGMP inspectional status, based on the profile class, is available through FDA's Freedom of Information (FOI) Office. (See Glossary under Satisfactory Current Good Manufacturing Practice (CGMP) Inspection for more information regarding FOI requests.)

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Examples of postapproval manufacturing site changes and recommended reporting categories:

- An applicant wants to move the manufacture of an immediate-release tablet (TCM) to a different manufacturing site that currently manufactures, and has satisfactory CGMP status for, capsules (CHG) and powders for oral solution (POW). This manufacturing site change should be submitted in a prior approval supplement because the new manufacturing site does not have a satisfactory CGMP inspection for immediate-release tablets.
- An applicant wants to contract out packaging operations for immediate-release tablets (TCM) and capsules (CHG) and modified-release capsules (CTR). The potential contract packager has a satisfactory CGMP status for immediate-release and modified-release capsules but has never packaged immediate-release tablets. The packaging site change for the immediate-release tablet drug products should be submitted in a prior approval supplement. The packaging site change for the capsule drug products should be submitted as recommended in section VI of this guidance for packaging sites with a satisfactory CGMP inspection.
- An applicant wishes to consolidate product testing to a single analytical laboratory at a manufacturing site. This manufacturing site produces various solid oral dosage form drug products, has an operational analytical laboratory currently at the site, and satisfactory CGMP inspections for the manufacturing occurring at the facility. Some of the drug products that will be tested at the analytical laboratory when the consolidation occurs are not solid oral dosage form products. Unlike most other production operations, testing laboratories (and other operations in boldface in the table) are not inspected on a dosage form/type of drug substance specific basis. The satisfactory CGMP inspection of the analytical laboratory, which was performed as part of the CGMP inspection for manufacture of the solid oral dosage form drug products, is considered to apply to all dosage forms, including those not actually produced at the site. The consolidation can be submitted in a changes-being-effected-in-30-days supplement if the change is consistent with the recommendations in section VI.C.1.d.

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ATTACHMENT C: CDER-APPROVED DRUG PRODUCTS

In several places throughout the guidance, different reporting categories are proposed for changes to or the addition of certain components based on whether the component/material has been used in and has been in contact with CDER-approved drug products. Different reporting categories are recommended once CDER has reviewed certain components/materials in association with a drug product approval because similar subsequent changes then have a reduced potential to have an adverse effect on the identity, strength, quality, purity, or potency of a drug product as these factors may relate to the safety or effectiveness of the drug product. For example, certain changes in the container closure systems of solid oral dosage form drug products may be included in an annual report as long as the new package provides the same or better protective properties and any new primary packaging component materials have been used in and been in contact with CDER-approved solid oral dosage form drug products (see section IX.D.4). If the new primary packaging component material has not been used in or has not been in contact with CDER-approved solid oral dosage form drug products, then submission of the change in an annual report is not recommended.

CDER-approved drug products are considered those drug products subject to an approved NDA or ANDA. Some information on which components/materials are used in CDER-approved products is available from the Agency (e.g., FDA, CDER, *Inactive Ingredient Guide*, 1996, Division of Drug Information Resources). When information is not available, an applicant should use reliable sources of information to determine that the component or material has been used in and has been in contact with a CDER-approved drug product of the same dosage form and route of administration, as appropriate. The applicant should identify in the supplement or annual report the basis for the conclusion that the component or material is used in a CDER-approved drug product.

If an applicant cannot confirm that a component or material has been used in and has been in contact with a CDER-approved drug product of the same dosage form and route of administration, the applicant has the option of submitting the change for a single NDA or ANDA using the higher recommended reporting category and, after approval, submitting similar changes for other NDAs and ANDAs using the lower recommended reporting category.

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GLOSSARY

Acceptance Criteria: Numerical limits, ranges, or other criteria for the tests described (21 CFR 314.3(b)).

Active Ingredient/Drug Substance: Any component that is intended to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of a disease, or to affect the structure or any function of the human body, but does not include intermediates used in the synthesis of such ingredient. The term includes those components that may undergo chemical change in the manufacture of the drug product and are present in the drug product in a modified form intended to furnish the specified activity or effect (21 CFR 210.3(b)(7) and 314.3(b)).

Assess the Effects of the Change: To evaluate the effects of a manufacturing change on the identity, strength, quality, purity, and potency of a drug product as these factors may relate to the safety or effectiveness of the drug product (21 CFR 314.3(b)).

Container Closure System: The sum of packaging components that together contain and protect the dosage form. This includes primary packaging components and secondary packaging components if the latter are intended to provide additional protection to the drug product.

Component: Any ingredient intended for use in the manufacture of a drug product, including those that may not appear in such drug product (21 CFR 210.3(b)(3)).

Drug Product: A finished dosage form, for example, tablet, capsule, or solution, that contains an active ingredient generally, but not necessarily, in association with inactive ingredients (21 CFR 210.3(b)(4)).

Final Intermediate: The last compound synthesized before the reaction that produces the drug substance. The final step forming the drug substance involves covalent bond formation or breakage; ionic bond formation (i.e., making the salt of a compound) does not qualify. Consequently, when the drug substance is a salt, the precursors to the organic acid or base, rather than the acid or base itself, should be considered the final intermediate.

Inactive Ingredient: Any intended component of the drug product other than an active ingredient.

In-process Material: Any material fabricated, compounded, blended, or derived by chemical reaction that is produced for, and used in, the preparation of the drug product (21 CFR 210.3(b)(9)). For drug substance, in-process materials are considered those materials that are undergoing change (e.g., molecular, physical).

Intermediate: A material that is produced during steps of the synthesis of a drug substance and undergoes further molecular change before it becomes a drug substance.

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Package: The container closure system and labeling, associated components (e.g., dosing cups, droppers, spoons), and external packaging (e.g., cartons, shrink wrap).

Packaging Component: Any single part of a container closure system.

Primary Packaging Component: A packaging component that is or may be in direct contact with the dosage form.

Reference Listed Drug: The listed drug identified by FDA as the drug product on which an applicant relies in seeking approval of its abbreviated application (21 CFR 314.3(b)).

Satisfactory Current Good Manufacturing Practice (CGMP) Inspection: A satisfactory CGMP inspection is an FDA inspection during which (1) no objectionable conditions or practices were found (No Action Indicated (NAI)) or (2) objectionable conditions were found, but voluntary corrective action is left to the firm and the objectionable conditions will not be the subject of further administrative or regulatory actions (Voluntary Action Indicated (VAI)).

Information about the CGMP status of a firm may be obtained by requesting a copy of the Quality Assurance Profile (QAP) from the FDA's Freedom of Information (FOI) Office. The QAP contains information on the CGMP compliance status of firms that manufacture, package, assemble, repack, relabel, or test human drugs, devices, biologics, and veterinary drugs. All FOI requests must be in writing (21 CFR 20.40(a)) and should be prepared following the instructions found in the reference entitled *A Handbook for Requesting Information and Records from FDA*. An electronic version of this reference is available on the Internet at http://www.fda.gov/opacom/backgrounders/foiahand.html.

Secondary Packaging Component: A packaging component that is not and will not be in direct contact with the dosage form.

Specification: The quality standard (i.e., tests, analytical procedures, and acceptance criteria) provided in an approved application to confirm the quality of drug substances, drug products, intermediates, raw materials, reagents, components, in-process materials, container closure systems, and other materials used in the production of a drug substance or drug product (21 CFR 314.3(b)).

* Insofar as this guidance adjusts reporting categories pursuant to section 506A of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.70, it does have binding effect.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
AT CLARKSBURG

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP, Plaintiffs, v. MYLAN PHARMACEUTICALS INC. and KINDEVA DRUG DELIVERY L.P., Defendants.	Civil Action No.: 1:22:cv-00035-GMG

MEMORANDUM OF LAW IN SUPPORT OF DEFENDANTS' MOTION TO DISMISS

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I. INTRODUCTION

In the Complaint, AstraZeneca seeks relief under two separate statutory schemes: the Hatch-Waxman Act which is a specialized Act that encourages early litigation between brand and generic pharmaceutical companies and has remedies available only to it (Count 1), and the Declaratory Judgment Act, alleging imminent infringement under the Patent Act (Count 2). Defendants, Mylan Pharmaceuticals Inc. ("Mylan") and Kindeva Drug Delivery L.P. ("Kindeva") (collectively, "Defendants"), respectfully move this Court to dismiss Count 1 of Plaintiffs' Complaint for failure to state a claim under Rule 12(b)(6) because this case is not a Hatch-Waxman case.[1]

The Hatch Waxman Act allows brand pharmaceutical companies to assert certain patents covering their products while the generic companies are seeking FDA approval of their versions, instead of having to wait until the generic has launched or is about to launch. This allows the companies to resolve patent disputes sooner and, where appropriate, "speed the introduction of low-cost generic drugs to the market." *Celgene Corp. v. Mylan Pharms. Inc.*, 17 F.4th 1111, 1117 (Fed. Cir. 2021) (quoting *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 566 U.S. 399, 405 (2012)). And while this case does involve Mylan's generic version of AstraZeneca's Symbicort® products, it comes years *after* Defendants' filed their Abbreviated New Drug Application ("ANDA") with the FDA and *after* that ANDA was approved by the FDA. The Hatch-Waxman Act does not apply in this situation.

The FDA's approval of Mylan's ANDA dooms AstraZeneca's quest for relief under the Hatch-Waxman Act, as that is only available to suits properly brought under it. The patent at issue in this case, U.S. Patent No. 11,311,558 ("'558 patent") was not even in existence at any time

[1] Defendants will separately file an Answer and Counterclaims to Count 2 of the Complaint, and are not moving to dismiss Count 2 here.

Mylan's ANDA was pending FDA approval. Therefore, AstraZeneca's plea for relief for remedies that are only available under the Hatch-Waxman Act before the ANDA has been approved, are baseless here and should therefore be dismissed under Federal Rule of Civil Procedure 12(b)(6). *See* Compl. ¶¶ 53–60, ECF No. 1 (pleading infringement under 35 U.S.C. § 271(a)); *id*. at Prayer for Relief at A, C-F (requesting Relief under 35 U.S.C. § 271(e)(4)).

II. BACKGROUND

A. THE PATENT-IN-SUIT

The '558 patent, titled "Composition for Inhalation," is directed to a formulation containing active ingredients budesonide and formoterol, inactive ingredients PVP and PEG, and propellant HFA 227, for use in a pressurized metered dose inhaler ("pMDI") to treat inflammatory respiratory conditions such as asthma and COPD. *See* ECF No. 1-2 ('558 patent) at 1:5-37; *see also* Compl. ¶ 11. The '558 patent issued on April 26, 2022, and the named inventors on the face of the patent are Nayna Govind and Maria Marlow, and it is assigned to AstraZeneca AB. ECF No 1-2. The '558 patent contains one independent claim, claim 1, and ten claims that depend from claim 1 and are directed generally to a formulation and certain respiratory disorder treatments. Claim 1 states:

> 1. A pharmaceutical composition comprising formoterol, budesonide or an epimer thereof, 1,1,1-2,3,3,3-heptafluoropropane (HFA 227), about 0.0005 to about 0.05% w/w polyvinyl pyrrolidone (PVP) K25, and about 0.05 to about 0.35% w/w polyethylene glycol (PEG) 1000 (PEG having an average molecular weight of 1000 Daltons).

Id. The '558 patent will expire in a little under eight months – on January 29, 2023.

B. THE HATCH-WAXMAN STATUTORY FRAMEWORK

Under the Hatch-Waxman Act framework, generic-drug sponsors can submit an Abbreviated New Drug Application ("ANDA") for a product bioequivalent to a reference drug. *Celgene*, 17 F.4th at 1117. Brand-drug sponsors are required to provide the FDA with the patents they assert cover the drug, and FDA will list them publicly in what is known as the Orange Book. *Id.* An

applicant must submit one of several certifications with respect to the Orange-Book-listed patents relevant to its ANDA. *See id.* One is a Paragraph IV certification, which asserts that the patent is invalid, unenforceable, or not infringed. *Id.* at 1118. Filing an ANDA containing a Paragraph IV certification is patent infringement under § 271(e)(2), allowing the brand to sue through a "highly artificial act of infringement." *Eli Lilly & Co. v. Medtronic Inc.*, 496 U.S. 661, 678 (1990); *Celgene*, 17 F.4th at 1118.

Under the Act, section 271(e)(2) is a "highly artificial act of infringement" created "for a very limited and technical purpose"—namely, to resolve patent disputes during a period in which "use of [the] patented invention [is] only for the purpose of obtaining premarketing approval." *Eli Lilly*, 496 U.S. at 678. However, it is only "*[p]rior to FDA approval*, [that] ANDA applicants generally must amend or supplement ANDAs to submit an appropriate patent certification for patents that issue after submission of the ANDA." *Vanda Pharms. Inc. v. West-Ward Pharms. Int'l Ltd.*, 887 F.3d 1117, 1127–28 (Fed. Cir. 2018) (emphasis added). The remedies specific to the Hatch-Waxman Act under section 271(e)(4) are available only to those actions that are properly brought under section 271(e)(2)(A). *See* 35 U.S.C. § 271(e)(4) ("For an act of infringement *described in paragraph (2)*." (emphasis added)).

C. MYLAN'S ANDA PRODUCTS

AstraZeneca holds the approved New Drug Application ("NDA") for Symbicort®. On June 26, 2018, Mylan submitted ANDA No. 211699 to the FDA, seeking approval to market inhalation aerosol products with budesonide and formoterol fumarate dihydrate in two strengths (160/4.5 µg and 80/4.5 µg) ("Mylan's ANDA"). Mylan's ANDA products are generic versions of AstraZeneca's Symbicort® pMDI products. After nearly 10 years of research and development, and millions of dollars spent in developing its safe and cost-effective generic Symbicort products, the FDA granted final approval to Mylan's ANDA on March 15, 2022. Compl. ¶25.

D. PROCEDURAL BACKGROUND

The present patent infringement suit represents AstraZeneca's third attempt to keep Mylan's ANDA products off the market.

On August 30, 2018, Mylan sent a Paragraph IV letter to AstraZeneca pursuant to 21 U.S.C. § 355(j)(2)(B), notifying AstraZeneca that it had submitted with its ANDA a Paragraph IV certification to the only patents then-listed in FDA's Orange Book, U.S. Patent Nos. 7,759,328 ("'328 patent"), 8,143,239 ("'239 patent"), and 8,575,137 ("'137 patent"). Compl. ¶¶26, 27. AstraZeneca filed suit in October 2018[2], for infringement of the '328, '239 and '137 patents. Case No. 18-cv-193, ECF No. 1. Like the '558 patent, each of the '328, '239 and '137 patents expire on January 29, 2023.

On October 11, 2019, Mylan amended its ANDA to include a Paragraph IV certification to a fourth patent, U.S. Patent No. 10,166,247 ("'247 patent") from the same family as the '328, '239 and '137 patents, listed in the Orange Book for Symbicort®. Compl. ¶27. AstraZeneca amended its Complaint to include allegations that Mylan's ANDA infringed the '247 patent under 35 U.S.C. § 271(e)(2)(A). Case No. 18-cv-193, ECF No. 89. The '247 patent also expires on January 29, 2023.

The parties disputed the meaning of the claim term "0.001%" PVP. *See* Case No. 18-cv-193, ECF No. 317 (Aug. 12, 2020 Mem. Opinion and Order Adopting AstraZeneca's Proposed Construction of the Term "0.001%"). Mylan spent significant time and resources developing its ANDA products that designed around the '328, '239 and '137 patents. However, in order to craft

[2] AstraZeneca filed suits in both the District of Delaware and the Northern District of West Virginia. *AstraZeneca AB V. Mylan Pharms. Inc.*, No. 18-cv-193 (N.D.W. Va.) (hereinafter "Case No. 18-cv-193"). The Delaware case was later transferred to the Northern District of West Virginia and consolidated with the earlier filed case. Before trial, Kindeva Drug Delivery L.P. was substituted for original co-defendant 3M Corp. Case No. 18-cv-193, ECF No. 386.

an infringement argument, AstraZeneca urged that "0.001%" should be construed to cover all PVP concentrations from 0.0005% to 0.0014%, while Mylan construed it in the context of the patent to mean that precise number with only minor variations, from 0.00095% to 0.00105%. *See id.* at 12-13. The issue was critical because the PVP concentration in the proposed ANDA products fell within AstraZeneca's construction, but outside of Mylan's. After the district court adopted AstraZeneca's construction (*id.* at 17), Mylan stipulated to infringement under that construction (*see* Case No. 18-cv-193, ECF No. 349 (Stipulation and Order)). At the same time, AstraZeneca agreed to drop its asserted claims of the '247 patent. *Id.* Both parties reserved their rights subject to the outcome of any appeal. *Id.*

The parties proceeded to a first trial in October 2020, regarding whether the asserted claims of the '328, '239, and '137 were obvious under 35 U.S.C. § 103. *See, e.g.*, Case No. 18-cv-193, ECF No. 431 (Mar. 2, 2021 Mem. Opinion and Order) at 3-4 & n.3. After trial, the district court ruled that the asserted claims would not have been obvious over the prior art. Case No. 18-cv-193, ECF No. 431. Mylan appealed both the district court's claim construction of "0.001%" PVP, as well as its non-obviousness decision. *See AstraZeneca AB v. Mylan Pharms. Inc.*, 19 F.4th 1325, 1329 (Fed. Cir. 2021). On appeal, the Court of Appeals for the Federal Circuit upheld the district court's obviousness finding, but reversed its claim construction of "0.001%" PVP, holding that the term should be construed "as that precise number, with only minor variations, i.e., 0.00095% to 0.00104%." *See id.* As a result, the Federal Circuit vacated the parties' infringement stipulation based on the district court's construction, and remanded for further proceedings. *Id.* at 1335.

On remand, AstraZeneca stipulated that Mylan's ANDA Products did not infringe the asserted claims of the '328, '239, '137, and '247 patents reciting "0.001%" PVP (Case No. 18-cv-193, ECF No. 549), and ultimately proceeded to a second trial, this time on the '247 patent, which

has different, and incredibly broader claims. Given the extraordinary breadth of potential formulations within the scope of these claims, and the very limited number of example formulations in the '247 patent's specification, Mylan asserted at trial that the specification failed to describe or enable the full scope of either claim under Section 112. Case No. 18-cv-193, ECF No. 563-12 at 9-15. Mylan also asserted that the term "stable," required by both claims, was indefinite. *Id.* at 3-9. Trial concluded on May 23, 2022, with post-trial briefing and closing arguments to be completed by June 22, 2022. Case No. 18-cv-193, ECF No. 586.

As the weaknesses in its existing patent portfolio became apparent, AstraZeneca raced to eke out more from their pending applications—filing yet another application in March 2020. Plaintiffs' last-ditch effort finally yielded the '558 patent. But it issued on April 26, 2022—more than a month *after* MPI's ANDA received final FDA approval. *See* Compl. ¶¶11, 25. Undeterred, AstraZeneca filed this suit – seeking a third trial on the newly-issued '558 patent and improperly alleging infringement under the Hatch-Waxman Act. Unlike the predecessor patents, Mylan never submitted a Paragraph IV certification or a notice letter for the '558 patent, as Mylan's ANDA had already received final FDA approval before the '558 patent issued.

III. LEGAL STANDARDS

"A motion to dismiss pursuant to Rule 12(b)(6) tests the sufficiency of the claims pled in a complaint." *ACA Fin. Guar. Corp. v. City of Buena Vista*, 917 F.3d 206, 211 (4th Cir. 2019). A complaint must contain "sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). And while this Court "must accept the factual allegations in the complaint as true," it "need not accept a complaint's legal conclusions," and so "simply reciting the cause of actions' elements and supporting them by conclusory statements does not meet the required standard." *Sheppard v. Visitors of Va. State Univ.*, 993 F.3d 230, 234 (4th Cir. 2021)

(quoting *ACA*, 917 F.3d at 212). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678. Conclusory statements and facts "merely consistent with a defendant's liability" do not suffice to carry a complaint over "the line between possibility and plausibility." *Id.* (cleaned up). Mere "[l]abels, conclusions, recitation of a claim's elements, and naked assertions devoid of further factual enhancement will not suffice." *ACA*, 917 F.3d at 211 (citing *Iqbal*, 556 U.S. at 678).

IV. ARGUMENT – COUNT 1 SHOULD BE DISMISSED FOR FAILURE TO STATE A CLAIM UNDER RULE 12(B)(6)

Count 1, which alleges infringement, should be dismissed under Rule 12(b)(6) for failure to state a claim. AstraZeneca alleges that "the submission of ANDA No. 211699" infringed the '558 patent under 35 U.S.C. § 271(e)(2)(A). Compl. ¶55. But that cannot be, as MPI's ANDA was already approved *before* the '558 patent issued, mooting the need to amend its ANDA to include a Paragraph IV certification to the '558 patent, which was not even listed in the Orange Book until May 20, 2022 – three weeks *after* AstraZeneca filed this suit. At no point did MPI submit an ANDA or amendment for a drug "claimed in" the '558 patent. The patent did not exist until Mylan's ANDA had already been approved by the FDA.

Courts have quickly winnowed out such claims before. The District of Delaware, for example, dismissed a § 271(e)(2)(A) claim where the ANDA in question was approved before the patent in suit issued. *Ferring B.V. v. Actavis, Inc.*, No. 15-4222, 2016 WL 3027446 (D.N.J. May 26, 2016). There, the defendant filed its ANDA in July 2010, and the FDA approved it in December 2012. *Id.* at *1. In 2015, that plaintiff obtained issuance of a new patent and assert it. *Id.* at *4. The court dismissed the patentee's § 271(e)(2) claim. *Id*. Like this case, the patentee in *Ferring* alleged that the defendants had filed an ANDA in the past that happened to infringe now. *Id.* The court

correctly rejected that theory, observing that "the artificial act of infringement" is "triggered by the *filing* of an ANDA," and that filing preceded the patent. *Id.* (emphasis added). And it reasoned that "Congress's inclusion of the phrase 'claimed in a patent' in the statute indicates that a § 271(e)(2)(A) claim must be based upon a patent that has already been issued at the time the infringing ANDA is filed." *Id.*

The rationale of *Ferring* is reinforced by *Celgene*, *Vanda*, and *Valeant*. In each, the Federal Circuit emphasized that *submitting* an ANDA or its amendment is what infringes—specific past acts. *Valeant* explained that "[u]nder the plain language of the statute, the only past infringing act is the ANDA submission." *Valeant Pharms. N. Am. LLC v. Mylan Pharms. Inc.*, 978 F.3d 1374, 1381 (Fed. Cir. 2020). *Celgene* reiterated that "it is the submission of the ANDA, and only the submission, that constitutes an act of infringement in this context." 17 F.4th at 1120 (quoting *Valeant*, 978 F.3d at 1381). And *Vanda* stated that "amend[ing] the ANDA by submitting a Paragraph IV certification" as to a later-issued patent was infringement. *Vanda*, 887 F.3d at 1127.

Each of *Celgene*, *Vanda*, and *Valeant* were predicated on the generic having submitted a Paragraph IV certification with the original submission to the ANDA, or as an amendment to the ANDA. *See Celgene*, 17 F.4th at 1119; *Vanda*, 887 F.3d at 1125, 1127; *Valeant*, 978 F.3d at 1376. Indeed, the "highly technical act" of infringement is tied to the Paragraph IV certification, and applications without one do not give rise to a § 271(e)(2)(A) claim. *See, e.g.*, *Eisai Co. v. Mutual Pharm. Co.*, No. 06-3613, 2007 WL 4556958, at *11–12 (D.N.J. Dec. 20, 2007) (dismissing § 271(e)(2) claim because ANDA did not contain Paragraph IV certification) (collecting cases); *Eli Lilly*, 496 U.S. at 678 (characterizing § 271(e)(2) as "infringement that consists of submitting an ANDA . . . containing the fourth type of certification"). Further, *Vanda* explained that an ANDA filer can be subject to a § 271(e)(2)(A) infringement claim "on a patent that issues after

the filing of the ANDA, *but before FDA approval*." 887 F.3d at 1127 (emphasis added). That is because "[p]rior to FDA approval," ANDA applicants must amend ANDAs with new Paragraph IV certifications to new patents. *Id.* at 1127–28. Here, however, the patent issued after FDA approval, and thus there was no Paragraph IV certification—in fact, Plaintiffs did not even list the patent in the Orange Book until weeks after Plaintiffs filed this suit.[3]

When the '558 patent issued, MPI no longer had an application pending with the FDA seeking to obtain final approval. Mylan has not submitted a Paragraph IV certification to the '558 patent and its already-approved application was never amended when the patent issued. Accordingly, there is no subject matter jurisdiction over this claim and the facts alleged in Plaintiffs' Complaint cannot support a claim for infringement under § 271(e)(2).

Plaintiffs' desire to use the Hatch-Waxman Act as a shield to its lucrative Symbicort monopoly against the very purpose of the Act, which was to get "generic drugs into the hands of patients – fast" should be rebuffed and Count 1 and its accompanying requested relief in paragraphs A, and C-F should be dismissed for failure to state a claim. *In re Barr Lab'ys, Inc.*, 930 F.2d 72, 76 (D.C. Cir. 1991) ("Congress sought to get generic drugs into the hands of patients at reasonable prices—fast.").

V. CONCLUSION

For the reasons above, Defendants respectfully request that the Court dismiss Count 1 and Prayer for Relief paragraphs A and C-F under Rule 12(b)(6) for failure to state a claim.

[3] Nor could a plaintiff allege infringement under § 271(e)(2)(A) for a hypothetical ANDA amendment that has not yet occurred. *See AstraZeneca Pharms. LP v. Apotex Corp.*, 669 F.3d 1370, 1380–81 (Fed. Cir. 2012).

Respectfully submitted this 1st day of June, 2022.

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CERTIFICATE OF SERVICE

I hereby certify that on the 1ST day of June, I electronically filed the foregoing "**Memorandum of Law in Support of Defendants' Motion to Dismiss**" with the Clerk using the Court's CM/ECF system, which will send notification of the filing to all counsel of record.

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
AT WHEELING

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP, *Plaintiffs*, v. MYLAN PHARMACEUTICALS INC. and KINDEVA DRUG DELIVERY L.P., *Defendant*.	Civil Action No. 1:22-CV-35-JPB

ASTRAZENECA'S OPPOSITION TO DEFENDANTS' MOTION TO DISMISS

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OTHER AUTHORITIES

Defendants Mylan Pharmaceuticals Inc. and Kindeva Drug Delivery L.P. ("Mylan") seek to uproot the carefully balanced and settled statutory scheme to adjudicate patent disputes between branded drug companies, who seek to enforce patents covering popular branded pharmaceutical products, and generic drug companies, who seek approval to market generic versions of those products. In particular, Mylan asserts that because the patent asserted in this case (U.S. Patent No. 11,311,558) issued after Mylan initially filed its application and obtained FDA approval for its generic product, AstraZeneca is barred from seeking relief for Mylan's infringement under 35 U.S.C. § 271(e). Mylan's novel interpretation of the Hatch-Waxman Act violates settled authority that Mylan fails to acknowledge, let alone distinguish.

Controlling Federal Circuit precedent forecloses Mylan's argument that approval of its generic application ("ANDA") extinguishes a claim of infringement under § 271(e). Even where "the FDA *has already approved the ANDA*," § 271(e) claims remain viable and operate to "alter the effective date of the application" to the date of patent expiration or applicable extension such as "pediatric exclusivity." *In re Omeprazole Patent Litig.*, 536 F.3d 1361, 1367-68 (Fed. Cir. 2008) (emphasis added); Dkt. No. 1 ("Compl."), Prayer for Relief ¶ D. That is the precise remedy AstraZeneca seeks in connection with its § 271(e) claim here.

Omeprazole involved a patent that did not *issue* after FDA approval but rather was *enforced* after approval. 536 F.3d at 1366. That distinction, however, is of no moment, because *Omeprazole*'s essential holding that a § 271(e) claim for prospective relief could be maintained after FDA approval also establishes, under elementary principles of civil procedure, that such a case *could be filed* after FDA approval. It is black-letter law of mootness that a claim for prospective relief requires "a live dispute . . . at every stage of the litigation." *E.g.*, *SAS Inst., Inc. v. World Programming Ltd.*, 874 F.3d 370, 389 (4th Cir. 2017). Mylan's argument that a

patentee may not state a § 271(e) claim upon which relief can be granted following FDA approval is contrary to *Omeprazole*, which expressly held that, following approval, § 271(e) "provided a remedy" and that relief may be granted for a claim under that provision. 536 F.3d at 1368. This precedent thus mandates denial of Mylan's motion, which is premised on the non-viability of a § 271(e) claim of infringement following FDA approval of the generic ANDA application.

Lest any doubt remain, in *Research Foundation v. Mylan Pharm. Inc.*, Judge Stark (then of the District of Delaware, now of the Federal Circuit) addressed a scenario indistinguishable from the present case, where the patent did not issue until after FDA approval. 2012 WL 1901267 (D. Del. May 25, 2012). Even though Mylan was the sole Defendant in *Research Foundation*, and AstraZeneca raised this case explicitly in the parties' pretrial memorandum before Judge Keeley just *last month*, Mylan omits and ignores *Research Foundation* entirely. In that case, the patent issued five days *after* FDA approval. *Id.* at *5 (ANDA approval July 1, 2010), *1 (patent issued July 6, 2010). Accordingly, the district court addressed squarely the issue Mylan presents here: whether relief under § 271(e)(4) was available for a patent issuing after FDA approval. And after considering the Federal Circuit's precedent, the court answered that question in the affirmative and ordered the following relief: "[p]ursuant to 35 U.S.C. § 271(e)(4)(A), the [FDA] is directed to withdraw final approval of any product that is the subject of Mylan's [ANDA]." *Id.* at *5, 7. Upon a showing of infringement in this case (which Mylan is unlikely to contest), AstraZeneca is entitled to the same relief here under § 271(e).

Nothing in the Hatch-Waxman Act or the caselaw permits—let alone mandates—the disparate treatment of the '558 patent that Mylan now urges based on its issuance *just five weeks* after Mylan's ANDA was approved. Fundamentally, the Hatch-Waxman Act does not prescribe

a deadline by which infringement must occur, nor does it entitle a generic manufacturer to infringe with impunity after the technical act of FDA approval of an ANDA. Mylan's partial motion to dismiss accordingly should be denied.

I. BACKGROUND

A. The '558 Patent And Prior Proceedings

AstraZeneca markets a pressurized metered dose inhaler (pMDI) called Symbicort®. Symbicort® is protected by several patents owned by AstraZeneca, including U.S. Patent No. 11,311,558 (the "'558 patent") asserted here. Compl. ¶¶ 1, 11, 14. The '558 patent is directed to pharmaceutical formulations (including Symbicort®) in which the active ingredients budesonide and formoterol are suspended in a liquid hydrofluoroalkane propellant (HFA 227) with the excipients polyvinyl pyrrolidone (PVP) and polyethylene glycol (PEG). Mylan's proposed generic product contains the same formulation as Symbicort® but with a slightly different amount of PVP. Compl. ¶¶ 31, 53-60.

The '558 patent is related through continuation applications to AstraZeneca's U.S. Patent Nos. 7,759,328 ("the '328 patent"), 8,143,239 ("the '239 patent"), 8,575,137 ("the '137 patent"), and 10,166,247 ("the '247 patent"). Like the '558 patent, each of these four patents is directed to formulations of budesonide and formoterol with HFA 227, PVP, and PEG, and all share the same specification. Compl. ¶ 12. The parties have now held two trials on these patents, both under the Hatch-Waxman Act.

In the first trial, AstraZeneca asserted the '328, '239, and '137 patents. Mylan stipulated to infringement and trial was thus limited to validity. *Id.* ¶ 28. After a five-day trial, the district court entered judgment of no invalidity as to each asserted claim, rejecting Mylan's sole defense of obviousness. *Id.* ¶ 29; *AstraZeneca AB v. Mylan Pharm. Inc.*, 522 F. Supp. 3d 200, 216-19 (N.D. W.Va. 2021). The Federal Circuit affirmed the judgment of no invalidity but disagreed

with the district court's claim construction of "0.001%" PVP and vacated the judgment of infringement, Compl. ¶ 30, *AstraZeneca AB v. Mylan Pharm. Inc.*, 19 F.4th 1325, 1337-38 (Fed. Cir. 2021). The claims asserted here essentially parrot the claims at issue in the first trial—the validity of which was confirmed by the district court and the Court of Appeals—except that the limitation of "0.001%" that was the subject of the Federal Circuit's ruling is replaced by a concentration range of "about 0.0005 to about 0.05%" PVP. Mylan cannot dispute it infringes this patent.

In the second trial, AstraZeneca asserted the '247 patent. Compl. ¶ 30. Mylan again stipulated to infringement, No. 18-cv-193, Dkt. No. 539 at 4, and the trial on Mylan's validity case concluded on June 22, 2022. Mylan's invalidity arguments in that case were directed at the '247 patent claims' requirement that the compositions be "stable"—a requirement that is not included in any claims of the '558 patent. A decision following the second trial is pending.

B. The Hatch-Waxman Act

The two prior trials, as well as this action, all involved claims for patent infringement under the Hatch-Waxman Act. The Hatch-Waxman Act codified a new act of infringement in section 271(e) of the Patent Act to facilitate adjudication of patent disputes relating to generic pharmaceutical products. *See Eli Lilly & Co. v. Medtronic*, 496 U.S. 661, 677 (1990). Under that section, a generic manufacturer that does not agree to await patent expiry before marketing its product commits an act of infringement, and courts then assess whether the proposed generic product, when marketed, would infringe a valid patent. *Id.* at 677-78. If all the asserted patents are found to be invalid or not infringed, the generic manufacturer may commercialize its product. But if one or more of the asserted patents are valid and infringed, the statute requires that the approval date for the generic manufacturer's FDA application (called an "ANDA") be reset—even if previously approved—to the date of expiry of the infringed patent, including any

"additional six-month period of market exclusivity (sometimes known as a period of 'pediatric exclusivity')." *Omeprazole*, 536 F.3d at 1367-68; 35 U.S.C. § 271(e)(4)(A) ("the court shall order *the effective date of any approval* of the drug . . . involved in the infringement to be a date which is not earlier than the date of the expiration of the patent which has been infringed"); 21 C.F.R. § 314.150(b)(10)(i).

The Hatch-Waxman Act "strikes a balance between two competing policy interests: (1) inducing pioneering research and development of new drugs and (2) enabling competitors to bring low-cost, generic copies of those drugs to market." *Vanda Pharm. Inc. v. West-Ward Pharm. Int'l Ltd.*, 887 F.3d 1117, 1126 (Fed. Cir. 2018). Under the Act, generic manufacturers may submit to FDA an abbreviated new drug application ("ANDA"). Unlike a new drug application ("NDA") submitted by a brand manufacturer, which must provide "independent evidence of safety and efficacy," an ANDA "piggy-back[s] on the brand's NDA" and requires only "show[ing] that the generic drug has the same active ingredients as, and is biologically equivalent to, the brand-name drug." *Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S*, 566 U.S. 399, 404-05 (2012) (citing 21 U.S.C. § 355(j)(2)(A)(ii), (iv)).

An ANDA can give rise to patent litigation under § 271(e), pursuant to the scheme created by the Hatch-Waxman Act. ANDA applicants submit "certifications" regarding patents that brand manufacturers list in the "Orange Book" as covering a drug product. Among those is the "paragraph IV" certification, which certifies that a listed patent "is invalid or that it will not be infringed." *Bristol-Myers Squibb Co. v. Royce Labs., Inc.*, 69 F.3d 1130, 1131 (Fed. Cir. 1995). When a generic applicant seeks approval to market its product before expiration (including regulatory extensions) of patents directed to the drug or the use thereof, the brand manufacturer may bring suit for patent infringement under § 271(e)(2). *E.g.*, *Caraco*, 566 U.S.

at 407. Section 271(e)(2) provides that it is "an act of infringement" to (1) "submit an application under [the Hatch-Waxman Act] for a drug . . . claimed in a patent," in order (2) "to obtain approval . . . to engage in the commercial manufacture, use, and sale of a drug" that is (3) "claimed in a patent, before the expiration of such patent." 35 U.S.C. § 271(e)(2)(A).

Crucially for present purposes, courts repeatedly have held that it is the act of "submit[ting] an application" for the generic product that is the statutory prerequisite to a § 271(e)(2) claim, and that no Paragraph IV certification is required for a claim of infringement to lie under that section. *See Impax Labs., Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1372-73 (Fed. Cir. 2006) (§ 271(e)(2) action proper without Paragraph IV certification); *Research Found.*, 2012 WL 1901267, at *4. Courts also have confirmed that the "application" is not simply the static document filed initially, but includes amendments and supplements thereto, *Vanda*, 887 F.3d at 1127-1128, and the act of "submit[ting] an application" likewise is not a single act, as maintaining an application satisfies this requirement, *see Impax Labs., Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1372-73 (Fed. Cir. 2006); *Research Found.*, 2012 WL 1901267, at *4. And contrary to Mylan's mischaracterization, the statute does not limit the actions giving rise to constructive infringement under § 271(e)(2) to the time "prior to FDA approval," Br. 3. Mylan points to no statutory language supporting such a temporal limitation, and as described below, the Federal Circuit has recognized that remedies under § 271(e)(2) continue to be available, and an infringement claim pursuant to that provision continues to be viable, even "*[i]f the FDA has already approved the ANDA*." *Omeprazole*, 536 F.3d at 1367-68 (emphasis added).

If a court concludes that the ANDA product does not infringe the asserted patents, then the ANDA may be approved and the generic filer lawfully may market its competing product.

But if infringement under § 271(e)(2) is found, then § 271(e)(4) sets forth the available remedies. As relevant here, § 271(e)(4)(A) specifically mandates the appropriate date for FDA approval, providing that "the court *shall* order *the effective date of any approval* of the drug . . . involved in the infringement to be a date which is not earlier than the date of the expiration of the patent which has been infringed." That mandatory relief attendant to a successful claim under § 271(e)(2) applies even where the ANDA application has been approved—in such circumstances, the Federal Circuit has held that approval is rescinded until the patent expiration or the end of any other relevant exclusivity period, such as pediatric exclusivity.[1] *Omeprazole*, 536 F.3d at 1367-69.

II. LEGAL STANDARD

To withstand a motion to dismiss under Rule 12(b)(6), a complaint need allege "only enough facts to state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). The Court must accept the complaint's allegations as true and draw all reasonable inferences in favor of the plaintiff. *SD3, LLC v. Black & Decker (U.S.) Inc.*, 801 F.3d 412, 418 (4th Cir. 2015).

III. ARGUMENT

Mylan can seek dismissal of AstraZeneca's claim for infringement under § 271(e) and the related relief only by advancing multiple legal propositions unsupported by precedent or the

[1] Technically, the order would "convert[] a final approval into a tentative approval," *Omeprazole*, 536 F.3d at 1368, which has the same effect of prohibiting a generic applicant from marketing its product until after expiry of the patent, including any associated regulatory exclusivities. "[T]entative approval" refers to "the FDA's determination that the ANDA has met the substantive requirements for obtaining generic marketing approval (by demonstrating, among other things, bioequivalence to the listed drug) but that final approval by the FDA is blocked by other barriers, such as a live patent, a 30–month stay caused by ongoing litigation, or certain exclusivity periods." *Apotex, Inc. v. Daiichi Sankyo, Inc.*, 781 F.3d 1356, 1360 n.1 (Fed. Cir. 2015).

statutory text. Mylan's argument distills to a complaint about timing: according to Mylan, no § 271(e) claim may lie where the filing and approval of an ANDA both precede the issuance of the infringed patent. But Mylan points to no such temporal restriction in the statute, and Federal Circuit precedent has rejected similar efforts to insert one.

A. A § 271(e)(2) Claim Does Not Require ANDA Filing Or A Paragraph IV Certification Before Patent Issuance

AstraZeneca's Complaint states a claim for infringement under § 271(e)(2) by "identify[ing] the ANDA and alleg[ing] that the proposed ANDA products will infringe," which is all that is required at the pleadings stage. *Celgene Corp. v. Sun Pharma Global FZE*, 2020 WL 1921700, at *3 n.4 (D.N.J. Apr. 6, 2020); *see Vanda*, 887 F.3d at 1125; *AstraZeneca Pharm. LP v. Apotex Corp.*, 669 F.3d 1370, 1377 (Fed. Cir. 2012). Indeed, AstraZeneca's infringement allegations go well beyond plausibility, as Mylan's infringement is *indisputable*: the '558 patent recites claims broader than those to which Mylan already has stipulated it infringes, Compl. ¶ 28, so Mylan necessarily infringes one or more claims of the '558 patent. *See Forest Labs., Inc. v. Abbott Labs.*, 239 F.3d 1305, 1311 n.3 (Fed. Cir. 2001) ("Any pharmaceutical composition that would infringe the [narrower] dependent claims must necessarily . . . also infringe the [broader] independent claims."). Mylan's contention that a § 271(e)(2) claim could not address "a hypothetical ANDA amendment that has not yet occurred" is therefore irrelevant, Br. 9 n.3. To be sure, any future amendment or supplement to Mylan's ANDA also would constitute § 271(e)(2) infringement (provided Mylan continues its commitment to an infringing product). *Vanda*, 887 F.3d at 1127.[2] But no such future act is required because Mylan's *current* ANDA

[2] Mylan's brief states that its ANDA "was never amended *when the patent issued*," Br. 9, but Mylan is silent as to whether any amendment or supplementation has since occurred now that the patent has been listed in the Orange Book, *id.* At a minimum, AstraZeneca is entitled to discovery regarding any FDA communications regarding its ANDA. *See Lefkowitz v. Scytl USA*,

infringes.[3] As the Federal Circuit explained in *Vanda*, in clarifying that a claim under § 271(e) does not turn on the timing of a patent's issuance, a patent issuing after an ANDA submission is still "a patent 'for a drug . . . the use of which is claimed in a patent,' [§ 271(e)(2)(A)], as contemplated in the Act even though it issued after [defendant] filed its ANDA." *Id.* at 1126.

Mylan stresses that *Vanda* involved an ANDA amendment that included a Paragraph IV certification addressing the patent at issue, *id.*; Br. 8-9. But that is a distinction without a difference. Section 271(e)(2) does not premise a cause of action on the formality of a Paragraph IV certification, and Mylan provides no basis to read such a requirement into the statute. The weight of precedent establishes that a Paragraph IV certification is unnecessary to state a § 271(e)(2) claim. In *Impax*, for example, the ANDA filer "became aware of" a patent "while preparing its ANDA" and then properly initiated an action under § 271(e)(2) *without* a Paragraph IV certification. 468 F.3d at 1372-73. Consistently, and contra the premise of Mylan's motion (at 7-9), courts have heeded the "plain language of § 271(e)(2)" and held "that a paragraph IV certification is not required to sustain a § 271(e)(2) infringement claim." *Apicore US LLC v. Beloteca, Inc.*, 2019 WL 1746079, at *4-5 (E.D. Tex. Apr. 18, 2019); *Allergan Sales, LLC v. Teva Pharm. USA, Inc.*, 2017 WL 3446634, at *6 (E.D. Tex. July 25, 2017) (same); *see Cephalon, Inc. v. Sandoz, Inc.*, 2012 WL 682045, at *5 (D. Del. Mar. 1, 2012) (rejecting "the sweeping conclusion that the absence of a Paragraph IV certification limits, as a matter of law, the court's subject matter jurisdiction"); *Research Found.*, 2012 WL 1901267, at *4 ("[A]

2016 WL 537952, at *1 n.1 (N.D. Cal. Feb. 11, 2016) (declining to consider new facts alleged in motion to dismiss through "attorney argument").

[3] In this respect, *AstraZeneca* is inapposite, because whether the ANDA product would infringe the patent claims hinged on "presumed future labeling amendments," 669 F.3d at 1381; here, in contrast, infringement of the '558 patent claims is indisputable (and certainly pleaded in the Complaint, ¶¶ 28, 31, 53-60) under Mylan's current ANDA. *Research Found.*, 2012 WL 1901267, at *4.

Paragraph IV certification against the [patent] was not required for Galderma to bring suit under Section 271(e)(2)."); *Teva Pharm. USA, Inc. v. Abbott Labs.*, 301 F. Supp. 2d 819, 829 (N.D. Ill. 2004) ("The language of § 271(e)(2)(A) does not require that the ANDA contain a certification to constitute an act of infringement."); *Bayer Healthcare LLC v. Norbrook Labs., Ltd.*, 2009 WL 6337911, at *9 (E.D. Wis. Sept. 24, 2009) ("[A] Paragraph IV certification is not required to trigger an infringement action under § 271(e)(2).").

Mylan cites a district court holding to the contrary, Br. 8 (citing *Eisai Co. v. Mutual Pharm. Co.*, 2007 WL 4556958, at *11-12 (D.N.J. Dec. 20, 2007)), but *Eisai* has been recognized as "contrary to [the Federal Circuit's subsequent] guidance" and cannot support "read[ing] a Paragraph IV requirement into § 271(e)(2)." *Med. Co. v. Eagle Pharm., Inc.*, 2016 WL 4418230, at *2 n.1 (D.N.J. Aug. 17, 2016) (citing *AstraZeneca*, 669 F.3d at 1377); *Merck Sharp & Dohme Corp. v. Sandoz Inc.*, 2013 WL 591976, at *3-4 (D.N.J. Feb. 14, 2013) (same). As the Federal Circuit explained in *AstraZeneca*, the proper focus under § 271(e)(2) is "the scope of approval sought in the ANDA," as the ANDA filing (rather than any particular kind of certification) is what "the statute defines [as] the infringing act." 669 F.3d at 1379; *Research Found.*, 2012 WL 1901267, at *1, *4.[4]

[4] The *Eisai* court itself cautioned that "it might read the statute differently on its own," 2007 WL 4556958, at *12, but instead relied on "*dicta*" in *Eli Lilly*, 496 U.S. at 678. *Eli Lilly* observed, without "detailed analysis," that submitting an ANDA "containing [a Paragraph IV] certification" would constitute § 271(e)(2) infringement. *Eisai*, 2007 WL 4556958, at *12 (citing 496 U.S. at 678). But *Eli Lilly* merely identified a *sufficient* condition for infringement; it did not purport to state what is *necessary* for infringement. Regardless, *Eisai* is also distinguishable (aside from its status as a discredited outlier). There, the patentee engaged in "repeated oversights in filing the wrong forms and wrong information with the FDA," which "was so egregious that its ability 'to take advantage of § 271(e)(2)' was forfeited." *Cephalon*, 2012 WL 682045, at *4 (quoting *Eisai*, 2007 WL 4556958, at *14)). Mylan can point to no such misconduct here.

B. FDA Approval Does Not Bar Assertion Of Claims Under § 271(e)(2)

Mylan additionally urges dismissal because its ANDA "was approved before the patent in suit issued." Br. 7. Again, the plain language of § 271(e) nowhere suggests an ANDA's approval date is at all meaningful. As described above, *supra* at 1, the Federal Circuit has explained that "[i]f the FDA has already approved the ANDA," the appropriate remedy for a claim under 271(e) is to "alter the effective date of the application, thereby converting a final approval into a tentative approval." *Omeprazole*, 536 F.3d at 1367-68. And that controlling precedent, while sufficient to warrant denial of Mylan's motion, does not stand alone. In addition to *Omeprazole*, the FDA and the D.C. Circuit have likewise recognized that upon finding infringement under § 271(e), the court may direct the FDA to reset an *already granted* approval. *Mylan Labs., Inc. v. Thompson*, 389 F.3d 1272, 1281-82 (D.C. Cir. 2004).

The Federal Circuit also addressed this scenario of the viability of a claim under § 271(e) following ANDA approval directly in *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1366 (Fed. Cir. 2008). There, during the pendency of the case, "the FDA approved Mylan's ANDA by operation of law." 520 F.3d 1358, 1366 (Fed. Cir. 2008). As here, Mylan argued that the agency's action restricted the remedies available under § 271(e) and that the district court erred by "reset[ting] the effective date of approval pursuant to [§ 271(e)(4)(A)]." *Id.* The Federal Circuit rejected soundly Mylan's argument, concluding that "the statute, as informed by its legislative history, supports the district court's action of resetting the effective date," and that "[t]he district court was correct to reset the effective date . . . directly under [§ 271]." *Id.* That is precisely the relief AstraZeneca seeks here.

The facts of *Omeprazole* are illustrative and demonstrate why Mylan's statutory restriction is incorrect. There, during the course of Hatch-Waxman litigation, "the FDA granted [defendant] final approval" to market its generic product, and the defendant elected to launch.

Id. Despite FDA approval and the commercial launch of the generic product (which has not occurred here), the case proceeded to a 42-day bench trial exclusively on the patentee's § 271(e) claims (because the patentee had dismissed its claims for damages). *Id.* While the court's ruling was pending, the patents expired, but the patentee retained "a six-month period of market exclusivity" in addition to the patent term, resulting from the patentee's pediatric testing. *Id.* at 1366-67. The court issued its decision during that post-ANDA approval period, holding the patents valid and infringed and ordering, pursuant to § 271(e)(4)(A) and its general equitable authority, that the defendant's approval be reset to the end of the patentee's period of pediatric exclusivity. *Id.* Similar to Mylan's argument here, the issue on appeal was whether the § 271(e) claim came too late—specifically, the defendant argued that the § 271(e) claim "became moot" upon the patent expiry and the court thus "lacked authority to order a change in the effective date" of the ANDA. *Id.* at 1367. The Federal Circuit disagreed based on the precedent discussed above, holding that courts retain authority to reset an already-granted FDA approval through the expiration of a patentee's pediatric exclusivity. *Id.* at 1367-68.

Accordingly, *Omeprazole* stands for the proposition that a patentee may *maintain* a claim under § 271(e) for prospective relief (resetting the ANDA approval date) after FDA approval (and even after patent expiry) and secure relief under § 271(e)(4)(A). *See id.* It follows necessarily, as a matter of matter of logic and law, that if a claim for prospective relief pursuant to § 271(e)(4)(A) is viable and provides a basis for relief after FDA approval of an ANDA (as the Federal Circuit held in *Omeprazole*), then a patentee could *file* such a viable claim that provides a basis for relief after FDA approval, as AstraZeneca did here. Nothing in the statutory scheme suggests that a different rule should govern merely because this § 271(e) action was not yet pending at the time of approval. On the contrary, it is well established that *standing*,

governing whether a suit may be brought, and *mootness*, governing whether a previously filed suit may be maintained, are controlled by the same case or controversy requirement. Mootness is "the doctrine of standing set in a time frame: The requisite personal interest that must exist at the commencement of the litigation (standing) must continue throughout its existence (mootness)." Henry P. Monaghan, *Constitutional Adjudication: The Who and When*, 82 Yale L. J. 1363, 1384 (1973). In other words, to award prospective relief "a live dispute must exist at every stage of the litigation." *SAS Inst., Inc. v. World Programming Ltd.*, 874 F.3d 370, 389 (4th Cir. 2017); *see Spencer v. Kemna*, 523 U.S. 1, 7 (1998); R.H. Fallon, Jr. et al., *Hart and Wechsler's the Federal Courts and the Federal System* 195 (7th ed. 2015); Wright & Miller, *Federal Practice & Procedure* § 3533. Any argument Mylan may advance (having ignored the issue in its principal brief) that AstraZeneca may maintain, after ANDA approval, a previously filed claim for relief under § 271(e) per *Omeprazole*, but cannot *file* a claim under § 271(e) after FDA approval, thus cannot be reconciled with *Omeprazole*'s holding that such a claim *remains* actionable and not moot until the patent and other relevant exclusivities have expired, 536 F.3d at 1367-68.

While *Omeprazole*, *Thompson*, and *Ortho-McNeil* involved patents that issued before FDA approval, *Research Foundation* addressed the precise scenario here where a patent issued after FDA approval of the ANDA. Judge Stark rejected Mylan's effort to evade § 271(e) liability in these circumstances, and so should this Court. Like here, the patent issued shortly after the "FDA approved Mylan's ANDA product." 2012 WL 1901267, at *5. Given that timing and the lack of a Paragraph IV certification, Mylan argued, as here, that relief under § 271(e) was unavailable. *Id.* at *4. The district court disagreed, recognizing in view of *AstraZeneca* and the plain text of the statute that "§ 271(e)(2) directs the analysis to the scope of

approval sought in the ANDA," not the presence of a Paragraph IV certification or the non-existence of FDA approval. *Id.* (citing *AstraZeneca*, 669 F.3d at 1379). The district court thus awarded relief under § 271(e)(4)(A), ordering that "the [FDA] is directed to withdraw final approval of any product that is the subject of Mylan's [ANDA]" and resetting "the effective date of any approval" to the expiration of the patent or any extensions thereof. *Id.* at *7. Again, AstraZeneca seeks the same relief.

Mylan cites a district court decision, *Ferring B.V. v. Actavis, Inc.*, 2016 WL 3027446 (D.N.J. May 26, 2016), that rested on reasoning subsequently repudiated by *Vanda*. *Ferring*'s holding that "a § 271(e)(2)(A) claim must be based upon a patent that has already been issued at the time the infringing ANDA is filed" is irreconcilable with *Vanda*'s later recognition that "[§] 271(e)(4) contains no carve-out for patents that issue after the date of submission of the original ANDA" and its conclusion that the appropriate remedy for § 271(e) infringement where FDA approval already has been granted is altering the effective date of the application, per *Omeprazole* and the other precedents discussed above. 887 F.3d at 1138-39 (citing *Omeprazole*, 536 F.3d at 1367-68; *Ortho-McNeil*, 520 F.3d at 1366; *Thompson*, 389 F.3d at 1281-84); *see also Impax*, 468 F.3d at 1372-73; *Research Found.*, 2012 WL 1901267, at *1, 4. The *Ferring* court did not cite, let alone address, any of the binding precedent on which *Vanda* relied, and instead invoked the same district court decision on which the *Vanda* district court erroneously relied, leading to reversal by the Court of Appeals. *Compare Vanda Pharm. Inc. v. Roxane Labs., Inc.*, 203 F. Supp. 3d 412, 435 (D. Del. 2016), *with Ferring*, 2016 WL 1732751, at *4 (both relying on *Endo Pharm. Inc. v. Amneal Pharm., LLC*, 2016 WL 1732751, at *3 (S.D.N.Y. Apr. 29, 2016)).[5]

[5] *Ferring* committed other errors as well. The court also asked whether the patentee really "need[ed]" a § 271(e) claim when other causes of action for infringement were available (e.g.,

Mylan also improperly attempts (at 8-9) to read a prohibition into *Vanda*'s upholding of § 271(e)(2)(A) claims "on a patent that issues after the filing of the ANDA, but before FDA approval." 887 F.3d at 1127. From this statement, Mylan tries to conjure an implicit rule that a § 271(e)(2)(A) action *after* FDA approval is improper. But *Vanda* itself refutes that notion by recognizing that relief may be granted for § 271(e) actions after final FDA approval, in accordance with earlier Federal Circuit precedent discussed above. *Id.* at 1138-39. In context, the cited language from *Vanda* merely summarized the facts presented, which involved a patent that issued after ANDA filing but before ANDA approval, *id.* at 1127; nothing suggests those facts were essential prerequisites to *Vanda*'s interpretation of the statute, as Mylan wrongly suggests.

Nor would it comport with common sense or the purpose of the Hatch-Waxman Act to condition the availability of § 271(e) claims on the patent issuing prior to FDA approval. Such approval might be withheld for any number of reasons irrelevant to whether the scope of approval sought in the ANDA would infringe a patent, *AstraZeneca*, 669 F.3d at 1379, such as when the generic's packaging facilities are "inadequate to ensure and preserve" the drug product, 21 C.F.R. § 314.127(a)(1).[6] And conversely, the FDA "does not independently assess" patent scope and "lacks 'both the expertise and the authority' to review patent claims"; accordingly,

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under § 271(a)), rather than whether such claims were actionable under § 271(e) as written. 2016 WL 3027446, at *4. Contradictorily, the court also found that eliminating § 271(e) claims would help provide generics "with finality with respect to their potential litigation risk," *id.* at *4, which is simply incorrect where, even without § 271(e), a patentee could still vindicate its rights under other statutory subsections. That is reflected in the present case, where Mylan does not seek dismissal of AstraZeneca's claims under § 271(a).

[6] Mylan also relies on *Valeant Pharm. N. Am. LLC v. Mylan Pharm. Inc.*, 978 F.3d 1374 (Fed. Cir. 2020) and *Celgene Corp. v. Mylan Pharm. Inc.*, 17 F.4th 1111 (Fed. Cir. 2021), both of which were venue decisions. Both unremarkably held that the "ANDA submission" was the infringing act for venue purposes, *Valeant*, 978 F.3d at 1382; *Celgene*, 17 F.4th at 1120 (citing *Valeant*); neither supports reading into § 271(e) the timing requirements Mylan seeks.

premising the existence of a § 271(e)(2) claim on the absence of a ministerial agency action would undermine the "fundamental assumption of the Hatch-Waxman Amendments . . . that the courts are the appropriate mechanism for the resolution of disputes about the scope and validity of patents." *Caraco*, 566 U.S. at 406-07 (quoting 68 Fed. Reg. 36683).

Because neither the statute nor precedent supports superimposing a pre-FDA-approval requirement onto the unambiguous text of § 271(e), Mylan's motion should be denied.

C. The Court Possesses Authority To Award Relief Even Absent § 271(e)

Mylan also seeks dismissal of "Prayer for Relief paragraphs A and C-F." Mylan devotes scant attention to these paragraphs and fails to explain why dismissal of Count 1 would also warrant dismissal of this requested relief. Br. 9. Even if Mylan were correct as to the unavailability of § 271(e) relief—and it is not—the Court could still order the relief AstraZeneca seeks as part of its equitable power.

AstraZeneca's Complaint seeks "entry of a permanent injunction, pursuant to 35 U.S.C. §§ 271(e)(4)(B) *and/or* § 283. Prayer for Relief ¶ C (emphasis added). Section 283 empowers the Court to "grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable." Mylan provides no basis to dismiss this relief that is generally applicable to patent infringement claims, including those claims that Mylan does not even challenge here, *see* Compl. ¶¶ 61-68; *Research Found.*, 2012 WL 1901267, at *2 (granting injunction under § 283).

Likewise, the Court retains equitable power to maintain "the status quo before infringement," including to set the effective date of Mylan's ANDA, irrespective of whether a viable § 271(e) claim is maintained. *See AstraZeneca AB v. Impax Labs., Inc.*, 490 F.Supp.2d 368, 375-76 (S.D.N.Y. 2007) (court maintained relevant authority "*either* under the Court's equitable power *or* 35 U.S.C. § 271(e)(4)(A)" (emphasis added)), *aff'd*, 536 F.3d 1361 (Fed. Cir.

2008); *see* Prayer for Relief ¶¶ D, H. Mylan also fails to address this authority, and its motion to dismiss should be denied on that basis.

Finally, Mylan also fails to provide any reason why AstraZeneca's claim for attorney fees under 35 U.S.C. § 285 should be dismissed. This also warrants denial of Mylan's motion.

CONCLUSION

For the foregoing reasons, Mylan's motion to dismiss should be denied.

Dated: June 29, 2022

Respectfully submitted,

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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
Clarksburg

ASTRAZENECA AB and **ASTRAZENECA PHARMACEUTICALS LP,**

Plaintiffs,

v.

CIVIL ACTION NO. 1:22-CV-35
Judge Bailey

MYLAN PHARMACEUTICALS, INC. and **KINDEVA DRUG DELIVERY L.P.,**

Defendants.

MEMORANDUM OPINION AND ORDER DENYING DEFENDANTS' MOTION TO DISMISS

Before the Court is Defendants' Motion to Dismiss [Doc. 29], filed June 1, 2022. In this patent infringement action brought by AstraZeneca AB and AstraZeneca Pharmaceuticals LP (collectively, "Plaintiffs"), Mylan Pharmaceuticals, Inc. and Kindeva Drug Delivery L.P. (collectively, "Defendants") move for the dismissal of Count I of Plaintiffs' Complaint for failure to state a claim under Rule 12(b)(6). For the reasons that follow, the Court **DENIES** the Motion.

I.BACKGROUND

On April 26, 2022, Plaintiffs filed its Complaint. *See* [Doc. 1]. In the Complaint, Plaintiffs allege patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 et seq., and in particular under 35 U.S.C. § 271(e). More specifically, Plaintiffs allege two counts: (1) Infringement of the '558 Patent and (2) Declaratory Judgment of Infringement of the '558 Patent. *See* [Id. at 11–14].

Plaintiffs seek injunctive relief precluding infringement, attorneys' fees, and any other relief the Court deems just and proper.

A. The Patent-in-Suit

The '558 patent, entitled "Composition for Inhalation," was issued by the United States Patent and Trademark Office ("the USPTO") on April 26, 2022, to AstraZeneca AB, upon assignment from the inventors Nayna Govind and Maria Marlow. The '558 patent is directed to pharmaceutical formulations, including Symbicort®, in which the active ingredients budesonide and formoterol are suspended in a liquid hydrofluoroalkane propellant ("HFA 227") with the excipients polyvinyl pyrrolidone ("PVP") and polyethylene glycol ("PEG").

The '558 patent is related through continuation applications to AstraZeneca's U.S. Patent Nos. 7,759,328 ("the '328 patent"), 8,143,239 ("the '239 patent"), 8,575,137 ("the '137 patent"), and 10,166,247 ("the '247 patent"). Like the '558 patent, all four patents are directed to formulations of budesonide and formoterol with HFA 227, PVP, and PEG, and all share the same specification. The parties in the above-styled case have held two trials[1] on these patents, both under the Hatch-Waxman Act.

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[1] The first trial involved the '328, '239, and '137 patents. Defendant Mylan stipulated to infringement and the trial was limited to validity. Senior District Judge Keeley entered judgment of no invalidity as to each asserted claim, rejecting Mylan's sole defense of obviousness. *See* ***AstraZeneca AB v. Mylan Pharm. Inc.***, 522 F.Supp.3d 200 (N.D. W.Va. Mar. 2, 2021) (Keeley, S.J.). The Federal Circuit affirmed the judgment of no invalidity but disagreed with the district court's claim construction of "0.001%" PVP and vacated the judgment of infringement. *See* ***AstraZeneca AB v. Mylan Pharm. Inc.*** 19 F.4th 1325 (Fed. Cir. 2021).

The second trial involved the '247 patent. Defendant Mylan stipulated to infringement, and the trial on Defendant Mylan's validity case concluded on June 22, 2022. A decision following the second trial is pending. *See* Civil Action No. 1:18-CV-193 (N.D. W.Va.) (Keeley, S.J.).

The claims asserted in the above-styled case parrot the claims at issue in the first trial–the validity of which was confirmed by this Court and the Court of Appeals–except that the limitation of "0.001% PVP" that was the subject of the Federal Circuit's ruling is replaced in the '558 patent by a concentration range of "about 0.0005 to about 0.05% PVP.

As to the second trial, Defendant Mylan's invalidity argument was directed at the '247 patent claims' requirement that the compositions be "stable"–a requirement that is not included in any claims of the '558 patent.

B. Defendants ANDA No. 211699

On June 26, 2018, Defendants submitted ANDA No. 211699 ("Mylan's ANDA") to the FDA, seeking approval to market inhalation aerosal products with budesonide and formoterol fumarate dihydrate in two strengths (160/4.5 µg and 80/4.5 µg). Mylan's ANDA products are generic versions of Plaintiffs' Symbicort® products. Defendants proposed ANDA generic product contains the same formulation as Symbicort® but with a slightly different amount of PVP. The FDA granted final approval to Mylan's ANDA on March 15, 2022.

II.DEFENDANTS' MOTION TO DISMISS

On June 1, 2022, Defendants' filed a Motion to Dismiss moving this Court to dismiss Count 1 of Plaintiffs' Complaint for failure to state a claim under Rule 12(b)(6). In support of the Motion, Defendants' argue that because the '558 patent was not even in existence during the time in which Mylan's ANDA was awaiting FDA approval, the provisions of the Hatch-Waxman Act do not apply and no relief can be afforded to Plaintiffs under the Act.

Moreover, Defendants state that Plaintiffs' claim that the submission of Mylan's ANDA infringed the '558 patent under 35 U.S.C. § 271(e)(2)(A) "cannot be" because Mylan's ANDA "was already approved *before* the '558 patent issued, mooting the need to amend its ANDA to include a Paragraph IV certification to the '558 patent, which was not even listed in the Orange Book until May 20, 2022 - three weeks *after* AstraZeneca filed this suit." *See* [Doc. 30 at 10].

Relying on ***Ferring B.V. v. Actavis, Inc.***, 2016 WL 3027446 (D. N.J. May 26, 2016)[2], Defendants assert that courts "have quickly winnowed out such claims before." *See* [Id.]. In ***Ferring***, the defendant filed its ANDA in July 2010, and the FDA approved it in December 2012. *See* ***Ferring***, 2016 WL 3027446, at *1. The plaintiffs' patent did not issue until June 2015. *See* ***id***. at *4. The court found that plaintiffs could not bring a § 271(e)(2)(A) claim on the facts alleged and dismissed the claim. *See* ***id***. at *5. In this case, Defendants argue that like in ***Ferring***, a § 271(e)(2)(A) claim must be based upon a patent that has already been issued at the time the infringing ANDA is filed.

A. Plaintiffs' Opposition to Defendants' Motion to Dismiss

In opposition, Plaintiffs' state that

> Mylan can seek dismissal of AstraZeneca's claim for infringement under § 271(e) and the related relief only by advancing multiple legal propositions unsupported by precedent or the statutory text. Mylan's argument distills to

[2] Defendants also rely on ***Celgene Corp. v. Mylan Pharm. Inc.***, 17 F.4th 1111 (Fed. Cir. 2021), ***Vanda Pharm. Inc. v. West-Ward Pharm. Int'l Ltd.*** 887 F.3d 1117 (Fed. Cir. 2018), and ***Valeant Pharm. N. Am. LLC v. Mylan Pharm. Inc.***, 978 F.3d 1374 (Fed.Cir. 2020) to reinforce the rationale of ***Ferring***. *See* [Doc. 30 at 11–12].

> a complaint about timing: according to Mylan, no § 271(e) claim may lie where the filing and approval of an ANDA both precede the issuance of the infringed patent. But Mylan points to no such temporal restriction in the statute, and Federal Circuit precedent has rejected similar efforts to insert one.

[Doc. 45 at 12–13]. Plaintiffs advance three arguments in opposition of dismissal. First, Plaintiffs argue that a § 271(e)(2) claim does not require ANDA filing or a Paragraph IV Certification before patent issuance. *See* [Id. at 13–15]. Second, Plaintiffs argue that FDA approval does not bar assertion of claims under § 271(e)(2). *See* [Id. at 16–21]. Third, Plaintiffs argue that this Court possesses the authority to award relief even absent § 271(e). *See* [Id. at 21–22].

Plaintiffs rely heavily on ***Research Foundation v. Mylan Pharm. Inc.***, 2012 WL 1901267 (D. Del. May 25, 2012) (Stark, J.). In ***Research Foundation***, a case indistinguishable from the above-styled case, Judge Stark addressed a scenario where the patent did not issue until after FDA approval. The patent was issued on July 6, 2010, just five days *after* the ANDA approval on July 1, 2010. *See* ***Research Foundation***, 2012 WL 1901267, at *5. Judge Stark squarely addressed the issue presented in the above-styled case: whether relief under § 271(e)(4) was available for a patent issuing after FDA approval. After addressing and considering the Federal Circuit's precedent, Judge Stark upheld the § 271(e) claim and ordered a reset of the approval date under § 271(e)(4) based on the patent issuing after the ANDA filing and approval. *See* ***id***. at *4, *7; *see also* ***In re Omeprazole Patent Litig.***, 536 F.3d 1361, 1367–68 (Fed. Cir. 2008) ("If the FDA has

already approved the ANDA, the district court's order would alter the effective date of the application, thereby converting a final approval into a tentative approval.").

III. STANDARD OF REVIEW

A complaint must be dismissed if it does not allege "enough facts to state a claim to relief that is plausible on its face." ***Bell Atl. Corp. v. Twombly***, 550 U.S. 544, 570 (2007); *see also* ***Giarratano v. Johnson***, 521 F.3d 298, 302 (4th Cir. 2008) (applying the ***Twombly*** standard and emphasizing the necessity of *plausibility*). When reviewing a motion to dismiss pursuant to Rule 12(b)(6) of the Federal Rules of Civil Procedure, the Court must assume all of the allegations to be true, must resolve all doubts and inferences in favor of the plaintiff, and must view the allegations in a light most favorable to the plaintiff. ***Edwards v. City of Goldsboro,*** 178 F.3d 231, 243–44 (4th Cir. 1999).

When rendering its decision, the Court should consider only the allegations contained in the Complaint, the exhibits to the Complaint, matters of public record, and other similar materials that are subject to judicial notice. ***Anheuser-Busch, Inc. v. Schmoke***, 63 F.3d 1305, 1312 (4th Cir. 1995). In ***Twombly***, the Supreme Court, noted that "a plaintiff's obligation to provide the 'grounds' of his 'entitle[ment] to relief' requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do. . . ." ***Twombly***, 550 U.S. at 555, 570 (upholding the dismissal of a complaint where the plaintiffs did not "nudge[ ] their claims across the line from conceivable to plausible.").

"[M]atters outside of the pleadings are generally not considered in ruling on a Rule 12 Motion." ***Williams v. Branker***, 462 F. App'x 348, 352 (4th Cir. 2012). "Ordinarily, a

court may not consider any documents that are outside of the Complaint, or not expressly incorporated therein, unless the motion is converted into one for summary judgment." ***Witthohn v. Fed. Ins. Co.***, 164 F. App'x 395, 396 (4th Cir. 2006). However, the Court may rely on extrinsic evidence if the documents are central to a plaintiff's claim or are sufficiently referred to in the Complaint. ***Id***. at 396–97.

IV.THE HATCH-WAXMAN ACT

The Drug Price Competition and Patent Term Restoration Act of 1984, Pub. L. No. 98-417, 98 Stat. 1585 (otherwise known as the "Hatch-Waxman Act"), seeks to encourage "pioneering research and development of new drugs," as well as the "production of low-cost, generic copies of those drugs." ***Eli Lilly & Co. v. Teva. Pharm. USA, Inc.***, 557 F.3d 1346, 1348 (Fed. Cir. 2009). To that end, a manufacturer may obtain FDA approval to market a generic drug by making a certification regarding patents listed in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations ("the Orange Book") as covering the NDA drug, and certifying that those patents are "invalid or will not be infringed by the manufacture, use, or sale of the new generic drug for which the ANDA is submitted" ("paragraph IV certification"). ***Id***. (citing 21 U.S.C. § 355(j)(2)(A)(vii)(IV)). Upon receiving a paragraph IV certification, a patentee may sue the applicant for patent infringement within 45 days, thus delaying FDA approval of the ANDA. ***Id***. (citing 21 U.S.C. § 355(j)(5)(B)(iii)).

In this case, where Plaintiffs have sued Defendants under the Hatch-Waxman Act for infringement of the patent-in-suit, the Court is tasked with deciding whether Mylan's ANDA product infringes upon the '558 patent.

V. DISCUSSION

At the motion to dismiss stage under Rule 12(b)(6), this Court finds that Plaintiffs' Complaint alleges enough facts to state a claim to relief that is plausible on its face for infringement under § 271(e)(2) by "identify[ing] the ANDA and alleg[ing] that the proposed ANDA products will infringe." ***Celgene Corp. v. Sun Pharma Gloval FZE***, 2020 WL 1921700, at *3 (D. N.J. Apr. 6, 2020). The allegations contained in Plaintiffs' Complaint go well beyond plausibility. Thus, this Court concludes that Plaintiffs have sufficiently pled infringement on one or more claims of the '558 patent.

IV.CONCLUSION

For the foregoing reasons, the Court **DENIES** Defendants' Motion to Dismiss [**Doc. 29**].

It is so **ORDERED**.

The Clerk is directed to transmit copies of this Order to all counsel of record herein.

DATED: July 12, 2022.

JOHN PRESTON BAILEY
UNITED STATES DISTRICT JUDGE

Confidential Material from Add354-408 Omitted

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF WEST VIRGINIA
AT WHEELING

ASTRAZENECA AB and ASTRAZENECA PHARMACEUTICALS LP, *Plaintiffs*, v. MYLAN PHARMACEUTICALS INC. and KINDEVA DRUG DELIVERY L.P., *Defendants*.	Civil Action No. 1:22-CV-35-JPB

DEFENDANTS' PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND [PROPOSED] FINAL JUDGMENT

Table of Contents

Pursuant to the Court's correspondence dated November 7, 2022, Defendants Mylan Pharmaceuticals Inc. and Kindeva Drug Delivery L.P. (collectively, "Mylan" or "Defendants") hereby submit their Proposed Findings of Fact and Conclusions of Law.

I. BACKGROUND

A. The Parties

PFOF 1. Plaintiff AstraZeneca AB is a corporation organized and existing under the laws of Sweden, with its principal place of business at S-151 85 Södertälje, Sweden.

PFOF 2. AstraZeneca AB is the current assignee and owner of U.S. Patent No. 11,311,558 ("the '558 patent").

PFOF 3. Plaintiff AstraZeneca Pharmaceuticals LP is a limited partnership organized and existing under the laws of the State of Delaware, with its principal place of business at 1800 Concord Pike, Wilmington, Delaware 19803.

PFOF 4. Mylan Pharmaceuticals Inc. ("Mylan") is a company organized and existing under the laws of the State of West Virginia, with a place of business at 781 Chestnut Ridge Road, Morgantown, West Virginia 26505.

PFOF 5. Defendant Kindeva Drug Delivery L.P. ("Kindeva") is a company organized and existing under the laws of the State of Delaware, with a place of business at 42 Water Street, Building 75, St. Paul, Minnesota 55170.

B. Mylan's ANDA

PFOF 6. Mylan filed an Abbreviated New Drug Application, ANDA No. 211699 ("Mylan's ANDA"), with the U.S. Food and Drug Administration on June 26, 2018, seeking approval to market generic versions of AstraZeneca's Symbicort® inhalation products ("Mylan's ANDA Products").

PFOF 7. Mylan's ANDA received final FDA approval on March 15, 2022.

PFOF 8. Mylan's ANDA received final FDA approval before the '558 patent issued.

PFOF 9. Mylan's ANDA received final FDA approval before the '558 patent was submitted by AstraZeneca to the FDA for listing in connection with Symbicort in the FDA's publication, *Approved Drug Products with Therapeutic Equivalence Evaluations* (commonly referred to as the "Orange Book.").

C. The '558 Patent

PFOF 10. The '558 patent is entitled "Composition for Inhalation" and was issued by the United States Patent and Trademark Office ("PTO") on April 26, 2022.

PFOF 11. The '558 patent issued from U.S. Application No. 16/832,590 ("the '590 application"), filed with the PTO on March 27, 2020.

PFOF 12. The '558 patent claims priority to Swedish patent application 0200312 (the "312 application"), filed on February 1, 2002, and expires on January 29, 2023.

D. Procedural History of the Case

PFOF 13. AstraZeneca filed its Complaint in this matter on the same day that the '558 patent issued—April 26, 2022. *See* ECF No. 1.

PFOF 14. In the Complaint, AstraZeneca asserts that (1) the submission of Mylan's ANDA to the FDA constituted infringement of the '558 patent under 35 U.S.C. § 271(e)(2)(A); and (2) the commercial manufacture, use, sale, offer for sale, or importation into the United States of Mylan's ANDA Products would infringe the '558 patent under 35 U.S.C. §§ 271(a), (b), (c), (f), and/or (g). *See* ECF No. 1 ¶¶ 54-65.

PFOF 15. AstraZeneca originally asserted infringement of claims 1-7, 12 and 13 of the '558 patent (the "Originally Asserted Claims").

PFOF 16. AstraZeneca subsequently identified a narrower set of claims, claims 1, 3, 4, 7, and 12 of the '558 patent (the "Asserted Claims"), as the claims it intended to assert at trial.

PFOF 17. Mylan asserted defenses and counterclaims that the Asserted Claims are invalid, claim 12 of the '558 patent is not infringed by Mylan's ANDA Products, and that there is no act of infringement under 35 U.S.C. § 271(e)(2).

PFOF 18. On November 23, 2022, the Court issued a Memorandum Opinion and Order (ECF No. 204) (the "Claim Construction Order"), construing the term "pharmaceutical composition," as recited by all claims of the '558 patent, to, *inter alia*, "not include a functional stability requirement."

PFOF 19. In the Claim Construction Order the Court also construed the term "about 0.001% w/w," as recited by claim 12 of the '558 patent, to mean "approximately" 0.001%;

PFOF 20. On October 20, 2022, Defendants filed a Motion for Partial Summary Judgment that the filing of Mylan's ANDA was not an act of infringement under 35 U.S.C. § 271(e)(2), because, *inter alia*, Mylan's ANDA was fully approved before the issuance of the '558 patent (ECF Nos. 156-157) (the "Motion").

PFOF 21. On December 5, 2022, the Court issued its Memorandum Opinion and Order (ECF No. 223) ("Summary Judgment Opinion") concluding that "Mylan supplemented the ANDA by submitting two 'Prior Approval Supplements' after the patent-at-suit issued. Such an act is a qualifying act of infringement under § 271(e)(2)(A). Clearly there is a patent in place and clearly an ANDA infringes it." Summary Judgment Opinion 20.

II. THERE ARE NO LIABILITY ISSUES FOR TRIAL

PFOF 22. On December 12, 2022, the parties jointly filed a Stipulation of Liability (ECF No. 229) that resolved all outstanding liability issues to be tried in this case. With all liability issues resolved, there are no witnesses to be called at trial.

III. SCOPE OF RELIEF IN DISPUTE

PFOF 23. On December 1, 2022, AstraZeneca submitted a status report opposition (ECF No. 219-1), which attached a proposed final form of judgment (ECF No. 219-2). Defendants object to AstraZeneca's proposed final judgment as *inter alia* overly broad, and unsupported by the law or facts of this case.

PFOF 24. On December 1, 2022, Defendants contacted the Court to request the opportunity to respond. That request was denied later that same day.

PFOF 25. On December 5, 2022, the Court held a pretrial conference and briefly heard argument relating to the scope of relief, but indicated that it believed there were still disputed issues remaining for trial, then scheduled to begin on December 13, 2022.

A. Scope of Patent Term and Patent Term Extensions

COL 1. This case involves two separate statutory schemes: the Patent Act, 35 U.S.C. §§ 1 *et seq*., and the Federal, Food, Drug and Cosmetic Act, as amended by the Hatch-Waxman Act and the Medicare Modernization Act of 2003, 21 U.S.C. §§ 301 *et seq.* (the "Hatch-Waxman Act"). Each Act sets forth a defined set of rights granted by Congress. And each has its own specialized terms of art. While the two Acts need to be read in light of each other, a right granted under one Act cannot be imputed as a right granted under the other, unless Congress has authorized that result. Moreover, the "infringement" section of Title 35, 35 U.S.C. § 271, includes provisions specific to the Hatch-Waxman Act, *e.g*., § 271(e).

COL 2. As discussed below, a patent's term defines the period during which a patentee has the exclusive right to make, use, sell, offer for sale, or import a patented invention. It accordingly limits the period in which a court may award injunctions and damages to enforce those rights.

B. Patent Term

COL 3. Patent terms are governed by 35 U.S.C. §§ 154 and 156. Under 35 U.S.C. § 154(a)(1), a patent grants the –

> right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.

COL 4. The patent's exclusive right "shall be for a term beginning on the date on which the patent issues and ending 20 years from" the filing of its earliest eligible priority date. *See* 35 U.S.C. § 154(a)(2). The requirement that a patent's exclusive right be only for a "limited" time is set forth in the Constitution. U.S. Const. art. I, § 8.

PFOF 26. The term of the '558 patent expires on January 29, 2023.

C. Patent Term Extensions

COL 5. Base patent terms may be adjusted or extended under two circumstances. *First*, the term of a patent may be adjusted due to delay in issuance by the PTO resulting from its examination of a patent application. *See* 35 U.S.C. § 154(b). Thus, when the term of a patent is shortened on the front end due to PTO delay, the term can be adjusted by adding an equal amount of time to the back end of the patent's normal term.

COL 6. *Second*, the Hatch-Waxman Act established a framework by which a patent's term may be extended in certain circumstances to recapture useable patent life lost during delays in FDA regulatory review of a New Drug Application ("NDA"). S*ee* 35 U.S.C. § 156; *see also Eli Lilly & Co. v. Medtronic, Inc.*, 496 U.S. 661, 669-70 (1990) (When a patent "relates to a product that cannot be marketed without substantial testing and regulatory approval, the 'clock' on his patent term will be running even though he is not yet able to derive any profit from the invention."). The Hatch-Waxman Act addressed this lost patent life by extending a patent term up to five years

if, *inter alia*, the product was "subject to a regulatory review period before its commercial marketing or use," and "the permission for the commercial marketing or use of the product after such regulatory review period [was] the first permitted commercial marketing or use of the product under the provision of law under which such regulatory review period occurred." 35 U.S.C. § 156(a); *see also Eli Lilly*, 496 U.S. at 669-71.

PFOF 27. The term of the '558 patent was not adjusted or extended under either § 154 or § 156 of the Patent Act.

PFOF 28. Therefore, after January 29, 2023, the '558 patent no longer "exclude[s] others from making, using, offering for sale, or selling the invention throughout the United States, or importing into the United States." 35 U.S.C. § 154(a)(1).

D. FDA Pediatric Exclusivity under the Hatch Waxman Act

COL 7. Unlike patent extensions, which are governed by Title 35, pediatric exclusivity is a regulatory privilege authorized under Title 21 ("Food and Drugs").

COL 8. Under 21 U.S.C. § 355a(c)(1), the FDA may ask a supplier of an FDA-approved drug to perform studies on the use of the drug in children.

COL 9. If the drug manufacturer complies, the FDA *may* grant a period of Pediatric Exclusivity that delays the date on which the FDA will approve an Abbreviated New Drug Application (ANDA) in certain circumstances defined by Congress. *See* § III.D.1, *infra*.

COL 10. A delayed ANDA approval date is the extent of pediatric exclusivity. Without ANDA approval, a generic manufacturer cannot market its drug. 21 U.S.C. § 355a. FDA approval is *not* needed to manufacture a drug. Pediatric exclusivity is awarded by the FDA, not by the courts or the PTO. And although an award of regulatory pediatric exclusivity may effectively extend a branded drug maker's commercial monopoly by keeping a generic drug maker's product off the

market until the FDA approves its ANDA, it does not extend the patent term itself nor prohibit the manufacture of the generic drug. *See* § III.D.2, *infra*.

1. When Pediatric Exclusivity Is Awarded

COL 11. Pediatric exclusivity may be granted only in certain scenarios. In the Pediatric Exclusivity Act, Congress set forth six circumstances in which a 6-month period of marketing exclusivity will apply—three of which involve other FDA-granted exclusivity periods and three which involve certifications related to Orange Book listed patents.

COL 12. Under the first three circumstances, the Pediatric Exclusivity Act provides an additional six months of exclusivity to an *already-awarded* FDA exclusivity:

[1] **New Chemical Entity ("NCE") Exclusivity**. A 6-month period of exclusivity will be added to the NCE periods set forth in 21 U.S.C. § 355j(5)(F)(ii). *See* 21 U.S.C. § 355a(c)(1)(A)(i)(I).

[2] **Three-year marketing exclusivity**. A 6-month period of exclusivity will be added to the three-year marketing exclusivity periods set forth in 21 U.S.C. § 355j(5)(F)(iii) and (iv). *See* 21 U.S.C. § 355a(c)(1)(A)(i)(II).

[3] **Orphan Drug Exclusivity ("ODE")**. A 6-month period of exclusivity will be added to the ODE periods set forth in 21 U.S.C. § 360cc(a). *See* 21 U.S.C. § 355a(c)(1)(A)(ii).

21 U.S.C. § 355a(c)(1)(A)(i).[1]

COL 13. None of the above-three circumstances apply in this case because the FDA has not awarded AstraZeneca any of those other three specified forms of exclusivity.

COL 14. In the other three circumstances, the additional 6-month period of exclusivity is tied to the ANDA holder's submission of a certification under 21 U.S.C. § 355(j)(2)(A)(vii). Section 355a(c)(1)(B)(i) applies a 6-month marketing exclusivity,

if the drug is the subject of—

[1] The provisions set forth in 21 U.S.C. § 355a(b)(1) et seq. mirror those set forth in § 355a(c).

> [4] (I) a listed patent for which a certification has been submitted under subsection[] … (j)(2)(A)(vii)(II)" [a so-called "Paragraph II certification"]; or
>
> [5] (II) a listed patent for which a certification has been submitted under subsection[] … (j)(2)(A)(vii)(III)" [a so-called "Paragraph III" certification].

21 U.S.C. § 355a(c)(1)(B)(i)(emphasis added).

COL 15. If a Paragraph II or III certification has been submitted, then "the period during which an application may not be approved under … section 355(j)(5)(B) of this title shall be extended by a period of six months after the date the patent expires (including any patent extensions)." 21 U.S.C. § 355a(c)(1)(B)(i).

COL 16. Section 355a(c)(1)(B)(ii) applies to certifications submitted under § 355(j)(2)(A)(vii)(IV) – a so-called Paragraph IV certification. Subsection (ii) states that

> [6] if the drug is the subject of a listed patent for which a certification has been submitted under subsection … (j)(2)(A)(vii)(IV) of section 355 of this title, and in the patent litigation resulting from the certification the court determines that the patent is valid and would be infringed, the period during which an application may not be approved under … section 355(j)(5)(B) of this title shall be extended by a period of six months after the date the patent expires (including any patent extensions).

21 U.S.C. § 355a(c)(1)(B)(ii).

COL 17. No provision of the Pediatric Exclusivity Act authorizes the addition of a 6-month period of exclusivity corresponding to a patent listed in the Orange Book when a certification regarding the patent has ***not*** been submitted with the ANDA. "The effect of the grant of pediatric exclusivity [thus] depends on the type of certification included in the ANDA." *AstraZeneca AB v. Impax Lab'ys, Inc.*, 490 F. Supp. 2d 368, 372 (S.D.N.Y. 2007). In particular, Congress made a Paragraph II, III or IV certification a prerequisite to pediatric exclusivity that applies after the patent expires. Without one of those certifications, there can be no additional regulatory pediatric exclusivity period following the expiration of a patent.

PFOF 29. Because Mylan's ANDA had already received final FDA approval before the '558 patent was issued, and consequently before the patent was listed in the Orange Book, Mylan submitted no certification regarding the '558 patent. *See* 21 C.F.R. §314.94(a)(12)(viii)(C)(2).

PFOF 30. Therefore, no provision of § 355a(c)(1) applies to Mylan's ANDA.

PFOF 31. As such, there is no factual or legal basis for the FDA or anyone else to apply the Pediatric Exclusivity Act to prohibit Mylan for marketing and selling its generic Symbicort's products after the '558 patent's expiration on January 29, 2023.

2. Pediatric Exclusivity Does Not Prohibit the Manufacturing or Use of A Patented Invention

COL 18. Even if pediatric exclusivity could be triggered in these circumstances, it cannot apply to anything other than FDA's approval of the ANDA required to market the generic product. That is because a "pediatric exclusivity period is not an extension of the term of the patent." *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1343 (Fed. Cir. 2015) (citing 21 U.S.C. § 355a(o)(1) ("distinguishing patent exclusivity from non-patent exclusivity")); *see also Daiichi Sankyo v. Mylan Pharms. Inc.*, No. 06-3462, 2016 WL 6138241, at *4 n.1 (D.N.J. Oct. 20, 2016) ("Pediatric exclusivity ... is not a patent term extension under 35 U.S.C. § 156.") (citing *FDA, Guidance for Industry Qualifying for Pediatric Exclusivity Under Section 505A of the Federal Food, Drug, and Cosmetic Act* (Sept. 1999) at 13).

COL 19. Indeed, both FDA and the courts have recognized that FDA lacks the expertise to determine matters of substantive patent law.[2]

[2] *See*, *e.g.*, *Caraco Pharm. Lab'ys, Ltd. v. Novo Nordisk A/S*, 566 U.S. 399, 406-07 (2012) ("According to [FDA], it lacks 'both the expertise and the authority' to review patent claims; although it will forward questions about the accuracy of a use code to the brand, its own 'role with respect to patent listing is ministerial.'" (cleaned up)); *aaiPharma Inc. v. Thompson*, 296 F.3d 227, 241 (4th Cir. 2002) ("FDA has no expertise in making patent law judgments."); *Am. Bioscience, Inc. v. Thompson*, 269 F.3d 1077, 1080 (D.C. Cir. 2001) ("The FDA, pursuant to longstanding practice and its own regulations, and based on its acknowledged lack of expertise and resources,

COL 20. The distinction is important because patent protection and regulatory exclusivities are not co-extensive. While a patent is in force, the patentee has the right to exclude others from making, using, selling, offering for sale, or importing the patented product (*see* §§ III.A-C, *supra*)—and in appropriate circumstances may obtain an injunction to enforce that exclusive right during the patent's term. Regulatory exclusivity is much more limited in scope, as FDA approval is necessary only to "introduce [a new drug] or deliver [it] for introduction into interstate commerce." 21 U.S.C. § 355a; *see also In re Schering Plough Corp. Intron/Temodar Consumer Class Action*, 678 F.3d 235, 239 (3d Cir. 2012) ("The FDCA ... provides that a drug cannot be *sold in interstate commerce* unless it is approved by the FDA …." (emphasis added)).

COL 21. Accordingly, once a patent on a pharmaceutical compound or product has expired, a generic competitor is free to manufacture that product, package it, label it, and prepare to sell it in this country before receiving FDA approval. *See Altana Pharma AG v. Teva Pharms. USA, Inc*., No. 04-2355, 2012 WL 2068611, at *2 (D.N.J. June 7, 2012) (distinguishing the prohibition on marketing a drug during the pediatric exclusivity period from the bundle of exclusive patent rights that do not apply once a patent has expired regardless of a continuing pediatric exclusivity period); *AstraZeneca*, 782 F.3d at 1343 ("We have long held that 'there can be no infringement once the patent expires,' because 'the rights flowing from a patent exist only for the term of the patent.'" (citation omitted)).

COL 22. In *Daiichi Sankyo v. Mylan Pharmaceuticals Inc*., the district court found that Daiichi Sankyo's patent was valid and infringed, and issued a final judgment that included the following injunction:

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has refused to become involved in patent listing disputes …."); *Watson Pharms., Inc. v. Henney*, 194 F. Supp. 2d 442, 445-46 (D. Md. 2001) ("[FDA] has no expertise—much less any statutory franchise—to determine matters of substantive patent law.").

> **ORDERED** that, pursuant to 35 U.S.C. § 271(e)(4)(B), Mylan, its officers, agents, servants and employees, and those persons in active concert or participation with any of them, are enjoined, *until the expiration date of the '599 patent, including all extensions thereof*, from engaging in the commercial manufacture, use, offer for sale, or sale within the United States, or importation into the United States, of the products which are subject of ANDA Nos. 78-276, 78-827, and 90-398.

2016 WL 6138241, at *1 (emphasis added).

COL 23. In *Daiichi*, because the injunction on the manufacturing and use expired when the patent and any patent term extensions expired, Daiichi Sankyo (the patentee) moved the court to amend the judgment under Fed. R. Civ. P. 60(a) to extend the injunction to the expiration of the pediatric exclusivity period, i.e., October 25, 2016. *See, e.g., id*. at *2. But the court denied Daiichi Sankyo's motion, observing that "[t]he FDA's grant [of pediatric exclusivity] did not extend the injunction issued by this Court, as the FDA's own guidance makes clear." *Id*. at *4. The court also noted that "Daiichi Sankyo now asks the Court to impute the pediatric exclusivity grant to the Judgment, as a *de facto* extension of the Court's injunction, which it clearly is not." *Id*. at *4 n.1.

PFOF 32. Thus, even if AstraZeneca could claim pediatric exclusivity even though Mylan did not file a certification, the Court cannot prohibit the manufacturing of Mylan's ANDA products after the '558 patent expires on January 29, 2023.

E. Any Injunction under § 271(e)(4)(B) Must End When the Patent Expires

COL 24. Section 271 of the Patent Act, 35 U.S.C. § 271, specifies what acts constitute infringement of a U.S. patent. In general, one who (without a license) makes, uses, sells, offers to sell, or imports a patented invention in the United States "during the term of the patent therefor" commits patent infringement, 35 U.S.C. § 271(a), and courts may award remedies for infringement including injunctions, damages, and attorneys' fees under 35 U.S.C. §§ 283 (injunctions), 284 (damages), and 285 (attorneys' fees).

COL 25. Section 271(e)(2), however, contains a special provision establishing a "highly artificial" act of infringement when a drug company submits an ANDA seeking FDA approval to market a generic version of an approved patented drug, even if it has not yet made or sold the drug. *See Eli Lilly*, 496 U.S. at 678.

COL 26. If a court finds that the proposed ANDA product would infringe a valid patent, the court may award remedies as set forth in Section 271(e)(4), including:

- an order making the effective date of FDA approval of the generic drug "not earlier than the date of the expiration of the patent which has been infringed," 35 U.S.C. § 271(e)(4)(A);
- "injunctive relief may be granted against *an infringer* to prevent the commercial manufacture, use, offer to sell, or sale within the United States or importation into the United States of an approved drug, veterinary biological product, or biological product." 35 U.S.C. § 271(e)(4)(B)(emphasis added); and
- "damages or other monetary relief may be awarded against *an infringer* only if there has been commercial manufacture, use, offer to sell, or sale within the United States or importation into the United States of an approved drug, veterinary biological product, or biological product." 35 U.S.C. § 271(e)(4)(C) (emphasis added).

COL 27. Sections 271(e)(4)(B) and (e)(4)(C) "provide the 'typical remedies' for patent infringement: injunctive relief and money damages." *AstraZeneca*, 782 F.3d at 1342 (citation omitted).

COL 28. The remedies in Section 271(e)(4) are the "only remedies," apart from attorneys' fees, that may be awarded for the artificial act of infringement established in Section 271(e)(2). 35 U.S.C. § 271(e)(4).

COL 29. It is axiomatic that a patent "infringer" under 35 U.S.C. § 271(e)(4)(B) can exist only when a patent exists to be infringed. The Federal Circuit has "long held that 'there can be no infringement once the patent expires,' because 'the rights flowing from a patent exist only for the term of the patent.'" *AstraZeneca*, 782 F.3d at 1343 (citation omitted).

COL 30. Once the patent expires, there are no longer exclusive rights to "making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States." 35 U.S.C. § 154 (defining the scope and term of the exclusive right to the patented invention); *cf. AstraZeneca*, 782 F.3d at 1344 (finding no entitlement to post-patent expiration damages "because Astra's rights during that period were not attributable to its patents and were not invaded by Apotex's [post-patent expiration] infringement.").

COL 31. In short, an injunction under 35 U.S.C. § 271(e)(4)(B) (or 35 U.S.C. § 283) prohibiting the commercial manufacture, use, offer to sell, or sale or importation cannot extend beyond the term of the patent because the statutory injunctions all are limited to the acts of an "infringer."

COL 32. Therefore, any injunction ordered here would have to expire upon the expiration date of the '558 patent, i.e., on January 29, 2023.

F. AstraZeneca's Request That the Court Invoke Its Equitable Powers Should Be Denied

PFOF 33. AstraZeneca argues that even if 35 U.S.C. §§ 271(e)(2) & (e)(4)(A) do not apply, this Court can still enter an order resetting the final approval date of Mylan's ANDA pursuant to its general equitable powers. For the following reasons, such relief is legally impermissible.

1. Equitable Relief Was Not Pleaded

PFOF 34. In its Complaint in this action, AstraZeneca did not seek relief in the form of an order resetting the final approval date of Mylan's ANDA under the Court's general equitable powers. *See* ECF No. 1 at Prayer for Relief.

PFOF 35. In its Response to Defendants' Status Report, AstraZeneca relies on two paragraphs from the Complaint's Prayer for Relief, paragraphs D and H, as requesting this relief.

See ECF No. 219-1 at 7. Neither of those paragraphs sought relief in the form of an order resetting the final approval date of Mylan's ANDA under the Court's general equitable powers. *See* ECF No. 1 at Prayer for Relief.

PFOF 36. Paragraph D sought the "entry of an order, ***pursuant to 35 U.S.C. § 271(e)(4)(A)***, that the effective date of any FDA approval of ANDA No. 211699 shall be no earlier than the expiration date of the '558 patent, or any later expiration of exclusivity for the '558 patent, including any extensions or regulatory exclusivities." ECF No. 1 at Prayer for Relief at ¶ D (emphasis added). Paragraph D thus sought entry of an order under 35 U.S.C. § 271(e)(4)(A), not under the Court's general equitable powers.

PFOF 37. Paragraph H was a boilerplate request for "[s]uch further relief as this Court may deem just and proper." ECF No. 1 at Prayer for Relief at ¶ H. Paragraph H did not seek relief in the form of an order resetting the final approval date of Mylan's ANDA under the Court's general equitable powers.

PFOF 38. AstraZeneca has never sought leave to amend its complaint to add a request for relief in the form of an order resetting the final approval date of Mylan's ANDA under the Court's general equitable powers.

COL 33. AstraZeneca's request for relief under the Court's general equitable power is barred by its failure to request that relief in the Complaint and to seek leave to amend the Complaint to add such a request. *See Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 491-92 (1964) (failure to plead claim barred recovery of certain relief); *see also Totes-Isotoner Corp. v. United States*, 594 F.3d 1346, 1354 (Fed. Cir. 2010) (plaintiff obligated to provide the grounds of entitlement to relief).

2. AstraZeneca cannot obtain "equitable" relief that Congress chose not to provide through law

COL 34. AstraZeneca's attempt to invoke the Court's general equitable powers also fails because such powers do not apply when Congress has specified what legal and equitable relief is available and under what preconditions. Where Congress has prescribed a specific set of remedies for a violation of a statutory provision, courts cannot ignore the statutory prerequisites for such remedies and proceed to order the remedy under their general equitable powers. *See*, *e.g.*, *Reno v. Bossier County School Board*, 520 U.S. 471, 485 (1997) ("'[I]t is well established that 'courts of equity can no more disregard statutory and constitutional requirements and provisions than can courts of law.'") (citation omitted).

COL 35. Pursuant to 35 U.S.C. § 271(e)(2)(A), it "shall be an act of infringement to submit" "an application under section 505(j) of the Federal Food, Drug, and Cosmetic Act or described in section 505(b)(2) of such Act for a drug claimed in a patent or the use of which is claimed in a patent."

COL 36. Congress provided that courts may "order the effective date of" an ANDA approval "to be a date which is not earlier than the date of the expiration of the patent which has been infringed" "***[f]or an act of infringement described in***" 35 U.S.C. § 271(e)(2). *See* 35 U.S.C. § 271(e)(4)(A) (emphasis added).

COL 37. Thus, by statute, an order resetting the effective date of an ANDA approval is a remedy available for an act of infringement described in 35 U.S.C. § 271(e)(2). *See* 35 U.S.C. § 271(e)(4)(A).

COL 38. Congress expressly limited the courts' equitable powers in § 271(e)(4), which directs that "[t]he remedies prescribed by subparagraphs (A), (B), (C), and (D) are the *only* remedies which may be granted by a court for an act of infringement described in paragraph (2),

except that a court may award attorney fees under section 285." 35 U.S.C. § 271(e)(4)(D) (emphasis added).

COL 39. AstraZeneca's request for an order resetting the final approval date of Mylan's ANDA under the Court's general equitable powers, even though 35 U.S.C. § 271(e)(4)(A) does not apply, is "an attempt to obtain through equity that which the law … forbids." *Bossier Parish Sch. Bd.*, 520 U.S. at 485. "It is well established that courts of equity can no more disregard statutory and constitutional requirements and provisions than can courts of law." *Id.* at 485 (cleaned up).

COL 40. The existence of general equitable powers "does not confer on the court unlimited authority to ignore plain statutory requirements and to alter the substantive rights of the parties." *In re Landbank Equity Corp.*, 973 F.2d 265, 271 (4th Cir. 1992).

COL 41. Indeed, the Supreme Court has recently reminded courts that they may not use their general equitable authority to order relief when "the relevant statutory scheme … contain[s] … 'elaborate enforcement provisions,' including … provisions that explicitly provide for that form of relief." *AMG Capital Mgmt. v. FTC*, 141 S. Ct. 1341, 1350 (2021) (citation omitted).

COL 42. Accordingly, when there has been no act of infringement under 35 U.S.C. § 271(e)(2), courts must and do refuse to order the relief specified in 35 U.S.C. § 271(e)(4)(A). *See Sanofi-Aventis Deutschland GmbH v. Glenmark Pharms. Inc., USA*, 821 F.Supp.2d 681, 697 (D.N.J. 2011) (remanded on other grounds) ("This Court agrees with Defendants that 35 U.S.C. § 271(e)(4)(A) is inapplicable to this case because the infringing acts fall under 35 U.S.C. § 271(a) (direct infringement), § 271(b) (inducement), and § 271(c) (contributory infringement), not under § 271(e)(4)(A) (infringement based on the act of filing the ANDA). Accordingly, this Court will

deny Plaintiffs' request for an order changing the ANDA effective date."), *aff'd*, 784 F.3d 1354 (Fed. Cir. 2014).

COL 43. AstraZeneca's lone cited case, *AstraZeneca v. Impax Lab'ys, Inc.*, 490 F.Supp.2d 368 (S.D.N.Y. 2007), is not to the contrary. In discussing "Equitable Relief," that court stated:

> Similarly, in this case, were the Court to find the patents valid and infringed ***and issue an order pursuant to 35 U.S.C. § 271(e)(4)(A)*** directing Impax's ANDA to have a delayed effective date, such an order would have the effect of returning the parties to the status quo before infringement—that is before Impax filed its ANDA with a Paragraph IV certification.

Id. at 375-76 (emphasis added).

COL 44. Thus, even when the *Impax* court was discussing its equitable powers, it still predicated the exercise of those powers on the issuance of an order pursuant to 35 U.S.C. § 271(e)(4)(A). *See id.* at 376.

COL 45. The Court also cannot invoke its general equitable powers to issue a mandatory or prohibitive injunction to the FDA. Absent statutory authority, courts in civil suits between private parties have no power to enjoin a non-party agency of the Executive Branch. *See, e.g.*, *Commercial Sec. Bank v. Walker Bank & Trust Co.*, 456 F.2d 1352, 1355-56 (10th Cir. 1972).

IV. [PROPOSED] FINAL JUDGMENT

Although the Court has found infringement under § 271(e)(2) and has concluded that AstraZeneca is consequently entitled to relief under 35 U.S.C. § 271(e)(4), that relief cannot extend beyond the patent's expiration date on January 29, 2023. Therefore, any relief under either 35 U.S.C. § 271(e)(4)(A) and/or § 271(e)(4)(B) beyond January 29, 2023 would be improper for the reasons explained above. Recognizing Defendants' reservation of their objections and without prejudice to Defendants' reservation to appeal that order, and underlying orders thereto, and any relief granted thereto, attached hereto as Exhibit A, is a [proposed] final judgment. This proposed

order mirrors the language in *Daiichi Sankyo*, 2016 WL 6138241, at *1, which AstraZeneca acknowledged was a "model" form of final judgment. *See* AZ Response to Mylan Status Report (ECF No. 219-1) at 12.

Respectfully submitted this 12th day of December, 2022.

/s/ William J. O'Brien
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Attorneys for Defendants
Mylan Pharmaceuticals Inc. and
Kindeva Drug Delivery L.P.

CERTIFICATE OF SERVICE

I hereby certify that, on this the 12th day of December 2022, I filed the foregoing "Defendants' Proposed Findings of Fact, Conclusions of Law and [Proposed] Final Judgment" with the Clerk of the Court using the Court's CM/ECF system, which will send notification of the same to all counsel of record.

/s/ William J. O'Brien
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Counsel for Defendants

Argall, Arthur

From: Dufresne, Andrew (MSN) <ADufresne@perkinscoie.com>
Sent: Monday, December 26, 2022 10:41 AM
To: Berl, David; Anstaett, David L. (MSN); Sheh, Anthony; Argall, Arthur; csipes@cov.com; Gary M. Rubman (grubman@cov.com); 'James F. Companion'; skl@schraderlaw.com
Cc: *Symbicort_558; Bagatell, Dan (WDC); Kelley, Nathan (WDC)
Subject: RE: Symbicort 558 patent - Service of Today's Federal Circuit Filings

David,

Mylan does not agree to the depositions you have proposed.

Best regards,
Andy

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-----Original Message-----
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Subject: RE: Symbicort 558 patent - Service of Today's Federal Circuit Filings

Andrew,

Mylan chose to submit written testimony from two witnesses never identified below in support of its expedited Motion for Stay. We do not believe that the arguments advanced in those declarations and the declaration testimony are proper. AstraZeneca simply requests an opportunity to examine those witnesses under oath to test the veracity of the testimony and surely is within its rights to do so. In order to minimize inconvenience, AstraZeneca is willing to conduct the depositions remotely. The due dates for Mylan's substantive briefs, referenced in your email below, were, respectively, requested by Mylan and ordered by the Court over AstraZeneca's objection and chosen unilaterally by Mylan. The notion that Mylan can claim prejudice on the basis of deadlines it dictated is, respectfully, not well taken.

It is not productive to debate further the propriety of Mylan's declaration testimony or AstraZeneca's entitlement to examine the declarants. Mylan obviously can make the witnesses available for deposition if it so chooses. Will Mylan do so or not?

Regards,

David

From: Dufresne, Andrew (MSN) <ADufresne@perkinscoie.com<mailto:ADufresne@perkinscoie.com>>
Date: Friday, Dec 23, 2022 at 5:21 PM
To: Berl, David <DBerl@wc.com<mailto:DBerl@wc.com>>, Anstaett, David L. (MSN) <DAnstaett@perkinscoie.com<mailto:DAnstaett@perkinscoie.com>>, Sheh, Anthony <ASheh@wc.com<mailto:ASheh@wc.com>>, Argall, Arthur <aargall@wc.com<mailto:aargall@wc.com>>, csipes@cov.com <csipes@cov.com<mailto:csipes@cov.com>>, Gary M. Rubman (grubman@cov.com) <grubman@cov.com<mailto:grubman@cov.com>>, 'James F. Companion' <jfc@schraderlaw.com<mailto:jfc@schraderlaw.com>>, skl@schraderlaw.com <skl@schraderlaw.com<mailto:skl@schraderlaw.com>>
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Subject: RE: Symbicort 558 patent - Service of Today's Federal Circuit Filings

David,

We are not aware of anything in the applicable rules that provides for the depositions you propose. Please identify what basis AstraZeneca has, if any, to request two depositions during this appellate proceeding, let alone in the context of an expedited motion, during the holidays, and just days before Mylan's deadline to file two related merits briefs.

Andy

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Cc: *Symbicort_558 <Symbicort_558@perkinscoie.com>; Bagatell, Dan (WDC) <DBagatell@perkinscoie.com>; Dufresne, Andrew (MSN) <ADufresne@perkinscoie.com>; Kelley, Nathan (WDC) <NKelley@perkinscoie.com>
Subject: RE: Symbicort 558 patent - Service of Today's Federal Circuit Filings

Dave,

In connection with the '558 appeal, and Motion for Stay filed by Mylan, AstraZeneca would like to take the deposition of the declarants relied upon by Mylan. Please confirm that the declarants are available for deposition at the times set forth below.

* Wayne Talton -- December 28 (9:00 am - 12:30 pm ET)
* Keith Meckstroth -- December 28 (1:00 - 4:30 pm ET)

Thank you,

David

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Subject: FW: Symbicort 558 patent - Service of Today's Federal Circuit Filings

David,

Your email server is bouncing this message due to file sizes. I am sending each attachment separately. I have copied the Covington and Schrader Companion lawyers here too. I have not received an undeliverable notice from Covington, but I have from Schrader Companion.

Best,
Dave

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Sent: Tuesday, December 20, 2022 12:08 PM
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Cc: *Symbicort_558 <Symbicort_558@perkinscoie.com<mailto:Symbicort_558@perkinscoie.com>>; Dufresne, Andrew (MSN) <ADufresne@perkinscoie.com<mailto:ADufresne@perkinscoie.com>>; Kelley, Nathan (WDC) <NKelley@perkinscoie.com<mailto:NKelley@perkinscoie.com>>; Bagatell, Dan (WDC) <DBagatell@perkinscoie.com<mailto:DBagatell@perkinscoie.com>>; gordon.copland@steptoe-johnson.com<mailto:gordon.copland@steptoe-johnson.com>; Jamie O'Brien <Jamie.Obrien@Steptoe-Johnson.com<mailto:Jamie.Obrien@Steptoe-Johnson.com>>
Subject: Symbicort 558 patent - Service of Today's Federal Circuit Filings

Counsel,

Attached please find service copies of filings just made in the Federal Circuit by Defendants-Appellants Mylan Pharmaceuticals Inc. and Kindeva Drug Delivery L.P.

Best regards,
Dave

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Appeal No. 2023-1267

United States Court of Appeals for the Federal Circuit

ASTRAZENECA AB, ASTRAZENECA PHARMACEUTICALS LP,
Plaintiffs-Appellees,

v.

MYLAN PHARMACEUTICALS INC., KINDEVA DRUG DELIVERY L.P.
Defendants-Appellants,

Appeal from the United States District Court for the Northern District of West Virginia in No. 1:22-cv-00035, Judge John Preston Bailey

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DECLARATION OF JAMES T. KENNEY, RPH, MBA

I, James T. Kenney, declare as follows:

1. I am President of JTKENNEY, LLC, an independent managed care industry consultancy established several years ago specializing in the pharmacy industry, including pharmacy benefit design, specialty pharmacy contracting, pharmacy benefit management ("PBM"), PBM contracting, prior authorization review, formulary management, drug utilization review, trend analysis, product pipelines, pricing strategy, rebate contracting, outcomes and value-based contracting, risk/financial modeling, product/business development, strategic planning, value assessments, product differentiation opportunities, and managed care training. My clients include health plans, financial firms, pharmaceutical manufacturers, medical device companies, digital health/therapeutics companies, data management firms, legal firms, and biopharmaceutical firms.

2. I have been a registered pharmacist in the Commonwealth of Massachusetts since January 22, 1980. I graduated from Providence College with a Bachelor of Science degree in Biology in May 1977 and enrolled in the Massachusetts College of Pharmacy where I received a Bachelor of Science degree in pharmacy in December 1979. I received an MBA from Boston University in May 1985.

3. Upon graduation from pharmacy school, I worked as an intern at CVS Pharmacy and upon passing the Massachusetts state board exam, I was hired as a

floating pharmacist for three months ending in April 1980. On May 11, 1980, I was hired full time at Harvard Community Health Plan ("HCHP"), a staff model HMO, where I held positions of staff pharmacist, Assistant Director of Pharmacy, Chief Pharmacist and Building Services Manager. In 1987, I was hired as Assistant Administrator of Central Professional Programs where I managed all of the HCHP pharmacies for one year and moved to the Purchasing Department in 1988 as Pharmacy Purchasing Operations Manager where I managed the contracting program including direct purchase agreements and rebates with pharmaceutical manufacturers. In my role, I negotiated the first PBM contract for HCHP with Prescription Health Services and managed that contract for seven years. I also developed the pharmacy network for HCHP and negotiated and signed over 900 pharmacy contracts with each independent or chain pharmacy in our service area that agreed to join our network.

4. In 1995, HCHP merged with Pilgrim Health Care, an IPA model plan, and the company name changed to Harvard Pilgrim Health Care ("HPHC"). I was on the contracting team for a new agreement that was negotiated with the PBM, Pharmacare, that lasted for five years. At the same time, my title changed to Pharmacy Operations Manager, and I managed all pharmaceutical purchasing and rebate contracts. In 2000, I worked with a team to negotiate a new PBM contract with MedImpact and that contract was negotiated and renewed with my involvement

with a term through the end of 2019. I was actively involved in the development of the requests for proposals ("RFPs"), negotiation and evaluation of the contracts and selection of the PBM in each RFP cycle from 2000-2018. Optum was selected in late 2018 and announced on January 24, 2019, as the new PBM with a start date of January 1, 2020. By the start date, I had left the company to pursue a consulting practice.

5. My role at HPHC also included negotiating the first specialty pharmacy contract with Novafactor in 1988 and all specialty pharmacy contracts during my tenure at the company which included the development and submission of all RFPs and the negotiation of all of the specialty pharmacy contracts. Over my career, I negotiated and signed specialty contracts with 20–25 specialty pharmacies including Priority Health, Freedom Fertility, Village Pharmacy, Accredo, Curascript, Diplomat and the largest contract was a preferred agreement with CVS Specialty pharmacy following an extensive RFP process that also included BriovaRx, Accredo and nine other specialty pharmacies.

6. I served on the pharmacy and therapeutics ("P&T") committees of HCHP and HPHC for over 35 years as a voting member. This involved evaluation of all products for formulary consideration, the development and implementation of utilization management ("UM") programs including the drafting and implementation of prior authorization guidelines, step edits, quantity limits,

physician restrictions and any other limitations placed on drug products in an effort to drive appropriate use and cost effectiveness. As part of my role, I coordinated with the clinical pharmacists at the plan to develop UM criteria in conjunction with the contract terms of all pharmaceutical, PBM, and specialty pharmacy contracts. The P&T committees were staffed by plan employee physicians and pharmacists along with external physicians and pharmacists and served in the capacity of an advisory group to the health plan. The members had a fiduciary responsibility to HCHP/HPHC to make sure that product evaluations balanced clinical and financial issues and did not place the plan at undo financial risk based on the decisions of the committees. In 1998, when Neighborhood Health Plan ("NHP"), a Managed Medicaid plan, formally affiliated with HPHC, I served on the NHP P&T Committee during the affiliation fulfilling the same role as the HPHC Committee. I also negotiated all pharmaceutical and specialty pharmacy agreements for NHP during that time period which lasted for 10 years.

7. My role also included working directly with our Sales team to assist our employer clients in evaluating, developing, and selecting appropriate insurance products and benefits for their employees. I presented to select employers on the pharmacy and medical benefits, utilization management programs, and contracting strategies including value and outcomes-based agreements.

8. I also served on the medical policy committee for 25 years which included the evaluation of all health care practitioner administered products and all UM criteria development and approval. I also participated in the review and selection of two medical benefit management companies, Magellan, and CVS Health Novologix, for medical benefit drugs over that time period.

9. My experience includes commercial, Medicare, Medicare Advantage Part D, Health Exchange, and Managed Medicaid books of business. I served on all P&T Committees for each of these groups of patients for some 35 years.

10. I have been a member of the Academy of Managed Care Pharmacy ("AMCP") for 32 years including seven years on the Board of Directors and three years as President of the organization. I also served on the following committees or teams: organizational affairs, legislative and regulatory action, student pharmacist, public policy, schools of pharmacy relations, format executive committee, membership, grassroots advisory, business development, finance, nominations, American Council on Pharmaceutical Education IDN workgroup, and the Journal of Managed Care and Specialty Pharmacy Editorial Advisory Board. AMCP is the leading professional managed care pharmacy association with over 8,000 members whose purpose is to assist patients to obtain the medications they need at a cost they can afford. AMCP's membership of pharmacists, physicians, nurses, and professionals in life sciences and biopharmaceutical companies seek to leverage

their specialized expertise in clinical evidence and economics to optimize medication benefit design and population health management and help patients access cost-effective and safe medications and other drug therapies. AMCP advocates at the national and state level for developing and applying evidence-based medication use strategies that improve access to medication, enhance patient and population health outcomes, and safeguard the wise use of health care dollars.

11. I am a member of the Biologics and Biosimilars Collective Intelligence Consortium ("BBCIC"). BBCIC is a non-profit research consortium that monitors the safety and effectiveness of biosimilars and novel biologics and provides the assurance needed to determine which medications deliver the best health outcomes. I am currently on the Steering Committee and Science Committee. I also served on the Planning Board and the Board of Managing Directors for four years including a year as Chair of the Board. AMCP established the BBCIC in 2015 to address anticipated needs for post-marketed evidence generation for novel biologics, their corresponding biosimilars, and other related products.

12. I have been a member of the Massachusetts Pharmacists Association ("MPhA") for over 30 years, and I currently serve on the MPhA Legislative Committee. I was a preceptor at the Massachusetts College of Pharmacy and the Northeastern University Bouvé College of Health Sciences for over 20 years mentoring and training pharmacy students at the colleges.

13. I have provided expertise to state legislatures in Massachusetts and Maine as well as the Attorneys Generals of Massachusetts and Connecticut.

14. A current copy of my CV is attached as Appendix A which includes articles, I have written in the past 15 years. I have not given any expert deposition or trial testimony in the past four years. I am being compensated for my time on this case at a rate of $700 per hour. My compensation does not depend on the opinions I have offered or on the outcome of the case.

15. I have reviewed Defendants-Appellants' Non-confidential Emergency Motion for a Stay Pending Appeal Under Federal Rule of Appellate Procedure 8(a)(2) and the attachments to the motion, including the non-confidential declarations of S. Wayne Talton and Keith Meckstroth. I have also reviewed the declaration of Dr. Robert P. Navarro, which was originally submitted on December 30, 2022. I agree with Dr. Navarro's analysis and conclusions, and I adopt his opinions as my own.

16. In my opinion, Defendants-Appellants ("Mylan") mischaracterize the process by which AB-rated generic pharmaceuticals are distributed, covered by PBMs or health plans, and sold. AB-rated generics are automatically substitutable at the point-of-sale (i.e., by the pharmacist according to state pharmacy regulations). Therefore, Mylan does not need to negotiate formulary status in order to "compete for access to Medicare Part D sales" or for sales to patients with commercial

insurance. Motion at 20; Add90. Even if Mylan desired to do so in this case, it would be able to do so as soon as it launched, as the process and timing for negotiating with Medicare and commercial insurers is much more fluid for generic medications than described in Mylan's motions and supporting declarations. Commercial insurers regularly add new drugs to their formularies throughout the year; Medicare allows plan sponsors to add new drugs at any time. Indeed, this is clear from the fact that companies routinely launch generic products with little or no advance notice at various times throughout the year without suffering any of the harm that Mylan claims it will suffer here if it is forced to further delay entering into negotiations relating to its generic version of Symbicort.

I. Pharmaceutical Distribution and Payments in the United States

17. Based on my experience in the industry, branded manufacturers typically sell drug products to wholesalers, who distribute drug products in turn to pharmacies, who then dispense prescriptions to insured consumers and consumers not using insurance ("cash consumers"). Generic manufacturers sell their products to wholesalers, but unlike branded manufacturers, generic manufacturers also sell substantial volumes directly to drug sourcing companies, some of which are owned by large pharmacy chains.[1]

[1] The Big Three Generic Drug Mega-Buyers Drove Double-Digit Deflation in 2018. Stability Ahead?, Drug Channels (Jan. 8, 2019), https://www.drugchannels.net/2019/01/the-big-three-generic-drug-mega-buyers.html; Meet the Power Buyers Driving Generic Drug Deflation, Drug

18. Manufacturers set and publish a drug's Wholesale Acquisition Cost (WAC). Branded manufacturers sell drug products to drug wholesalers throughout the United States at a price based upon the WAC, but often adjusted with various discounts, incentives, and administrative fees. Drug wholesalers then sell drug products to retail, mail, and specialty pharmacies (as well as hospitals, or closed model health plans with owned pharmacies). Generic manufacturers generally sell drug products to both wholesalers and drug sourcing companies that purchase drugs for pharmacies at negotiated WAC-based prices, with discounts, incentives, and administrative fees.

19. Insurance coverage pays for 95% of prescriptions, with only 5% of prescriptions purchased by cash consumers. In 2019, private commercial insurance paid for 51% of insured prescriptions, Medicaid paid for 16%, Medicare paid for 28% of prescriptions, and 5% were purchased by cash consumers.[2] Insured consumers are members of private commercial insurance, union health and welfare trusts, Medicaid, Medicare, or Health Insurance Marketplace insurance programs. Purchasers of insurance, and insurance companies, are often referred to as "third

Channels (Feb. 1, 2018), https://www.drugchannels.net/2018/02/meet-power-buyers-driving-generic-drug.html

[2] *Number of Retail Prescription Drugs Filled at Pharmacies by Payer*, Kaiser Family Foundation, https://www.kff.org/health-costs/state-indicator/total-retail-rx-drugs/?dataView=1&currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

party payors" or "plan sponsors". Both insured and cash consumers obtain prescriptions from retail pharmacies (whether independent pharmacies, chains, or within mass merchandizers or grocery stores), mail service pharmacies, or specialty pharmacies.

20. Medicare covers over 61 million recipients. Medicare Part D is an optional outpatient prescription drug coverage that can be purchased as a stand-alone policy from certain health plans and PBMs. Over 49 million Medicare recipients were enrolled in 766 Medicare Part D stand-alone prescription drug plans (PDPs) in 2022. An additional 24 million people receive prescription drug coverage through a Medicare Advantage (also known as a Medicare Part C) plan.[3,4]

21. Many plan sponsors contract with pharmacy benefit managers (PBMs) to manage coverage for prescriptions. PBMs are specialized companies that develop and manage highly controlled prescription drug benefit programs for private and public entities and government purchasers. The top three PBMs insure about 80 percent of the insurance market, and the top six PBMs provided more than 95 percent

[3] *See generally* Medicare, Centers for Medicare & Medicaid Services, https://www.cms.gov/medicare/medicare, last accessed December 27, 2022); Medicare Advantage, CMS website, https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/MedicareAdvantage.

[4] An Overview of Medicare, February 2019, Kaiser Family Foundation website, https://files.kff.org/attachment/issue-brief-an-overview-of-medicare; *An Overview of the Medicare Part D Prescription Drug Benefit*, Kaiser Family Foundation (Oct. 19, 2022), https://www.kff.org/medicare/fact-sheet/an-overview-of-the-medicare-part-d-prescription-drug-benefit/.

of insured individuals with prescription drug benefits in the U.S. in 2022.[5] To manage costs, PBMs often employ aggressive drug formulary management practices that include, among other things, obtaining price concessions from manufacturers of branded products in exchange for formulary placement.[6]

22. The actuarial consultancy Milliman states that, "PBMs are working tirelessly to…combat the rising cost of prescription drugs."[7] The Pharmaceutical Care Management Association ("PCMA") reports that PBMs can reduce prescription drug benefit costs by 20% compared to unmanaged benefits.[8] PBMs negotiate brand drug price concessions (*i.e.*, discounts off the purchase price, or retrospective rebate payments) from manufacturers to reduce net prescription costs. Drugs with lower costs, such as generics, or brand drugs with rebates are often preferred in drug formulary listings. The PCMA report also states that it is not

[5] The Top Pharmacy Benefit Managers of 2021: The Big Get Even Bigger, April 5, 2022, Drug Channels website, https://www.drugchannels.net/2022/04/the-top-pharmacy-benefit-managers-of.html.

[6] See Navarro RP, Kenney JT, et al., Managed Care Contracts With Pharmaceutical Manufacturers, in Managed Care Pharmacy Practice 364–366 (Robert P. Navarro ed., 2d ed. 2009); Visante, Pharmacy Benefit Managers (PBMs): Generating Savings for Plan Sponsors and Consumers (Feb. 2020), https://www.pcmanet.org/wp-content/uploads/2020/02/Pharmacy-Benefit-Managers-Generating-Savings-for-Plan-Sponsors-and-Consumers-2020-1.pdf ("Visante Report").

[7] Milliman, *Controlling Rx Costs: Top 5 reasons for a PBM RFP*, White Paper, at 3 (March 2021), https://us.milliman.com/-/media/milliman/pdfs/2021-articles/3-12-21-controlling-rx-costs-top-5-reasons.ashx.

[8] Visante Report at 3.

uncommon for rebates to exceed 40% to 50% of brand drug costs,[9] and large PBMs have reported that up to 98% of rebates were passed on to plan sponsors and insured consumers.[10,11]

II. Formularies

23. A "drug formulary" is a list of drugs, developed and published by a PBM or health plan, that includes drugs eligible for coverage for insured consumers. Drugs included on health plan and PBM drug formularies are eligible for coverage and reimbursement but may be subject to dispensing limitations and restrictions.[12] Formularies are dynamic lists: they change as new drugs enter or leave the market and new drug information on existing medications, including clinical and/or cost data, are made available.

24. Formularies are organized by therapeutic category or other clinical taxonomy, and also by specific relative net cost and cost share levels or tiers. Drugs in formularies are listed in a specific tier depending on the type of drug and relative

[9] *Id*. at 15–16.

[10] Amid Drug Price Scrutiny, CVS Says Its PBM Retains Just 2% of Rebates, August 8, 2018, https://www.forbes.com/sites/brucejapsen/2018/08/08/amid-scrutiny-cvs-says-its-pbm-retains-just-2-of-drug-rebates/?sh=528a67ca63cc.

[11] New Disclosures Show CVS and Express Scripts Can Survive in a World Without Rebates. Are Plan Sponsors Now the Real Barrier to Disruption? August 14, 2018, https://www.drugchannels.net/2018/08/new-disclosures-show-cvs-and-express.html.

[12] *See generally* Navarro RP, Dillon MJ, and Grzegorczyk JE, *Role of Drug Formularies in Managed Care Organizations*, in Managed Care Pharmacy Practice 233–252 (Robert P. Navarro ed., 2d ed. 2009).

net cost. The lowest net cost drugs are typically listed in the lowest tier level (e.g., low cost generic drugs), which has the lowest patient copayment. Higher net cost drugs are typically listed in higher formulary tiers with higher copayments. Tiers and cost shares are designed to incentivize the use of the lowest cost drugs that are clinically acceptable for a particular patient's medical need.[13] The most common commercial formularies have four or more tiers.[14]

25. Brand drug manufacturers frequently offer price concessions (e.g., rebates) to PBMs to win shared or exclusive placement on a preferred tier. A drug rebate is a return of part of the drug cost by the manufacturer to the purchaser, usually by providing back a certain percentage of the drug WAC.[15] For example, a PBM may move a Tier 3, non-preferred brand drug, to Tier 2, preferred brand drug, as a result of a rebate that lowers the net cost of the drug.

[13] *See Formulary Management*, Academy of Managed Care Pharmacy (Nov. 2009), at 3–4, https://amcp.org/sites/default/files/2019-03/Formulary%20Management.pdf.

[14] *See* 2021 Employer Health Benefit Survey ("Health Benefit Survey") November 10, 2021, Figure 9.6, https://www.kff.org/report-section/ehbs-2021-section-9-prescription-drug-benefits/.

[15] *See, e.g.*, Navarro RP, Kenney JT, et al., *Managed Care Contracts With Pharmaceutical Manufacturers*, in Managed Care Pharmacy Practice 362–367 (Robert P. Navarro ed., 2d ed. 2009).

III. Mylan's access to Medicare sales

26. Mylan claims that the deadline for Medicare Part D plans to submit their 2024 formularies is in May 2023.[16] It further claims that if they "cannot obtain final approval by May 2023, they will not have another meaningful opportunity to compete for the majority of Medicare sales until May 2024, and their generic products would not be sold under Medicare Part D until 2025."[17]

27. Mylan is incorrect. Although Medicare Part D plans must regularly submit their formularies to the Centers for Medicare & Medicaid Services (CMS), the Medicare Prescription Drug Benefit Manual makes clear that this yearly process is intended to limit or prevent "negative formulary changes" that would restrict patient access to drugs.[18] There are no restrictions on plans' ability to make positive changes to add new drugs to their formularies. As stated in the Manual:

> Part D sponsors may expand formularies by adding drugs to their formularies, reducing copayments or coinsurance by placing a drug on a lower cost-sharing tier, or deleting utilization management requirements *at any time during the year*.[19]

[16] Motion at 20; Add90.

[17] Motion at 20.

[18] Medicare Prescription Drug Benefit Manual, Chapter 6 – Part D Drugs and Formulary Requirements, § 30.3.3.1.

[19] *Id.* (emphasis added).

Moreover, plans do not need to obtain CMS approval before adding drugs to their formularies. Such an addition "can be implemented immediately by a sponsor and should be submitted to CMS at the next scheduled opportunity."[20]

28. Moreover, Medicare regulations *encourage* plans to add generic drugs to their formularies to reduce costs for Medicare members. Although removing a drug from a formulary or moving it to a less favorable tier is generally considered a "negative formulary change" that must be pre-approved by CMS, a Medicare Part D sponsor may "immediately" replace a brand drug with a generic.[21] At one time, plans had to at least submit a negative formulary change request and wait 30 days before making such a substitution.[22] But since 2019, even that requirement has been removed. Plans need only "provide CMS required notice of specific generic substitutions by submitting monthly formulary update files that reflect the generic addition and corresponding change to the brand name drug."[23]

29. In my experience, PBMs and health plans generally add AB-rated generics to their formularies and make them available to Medicare recipients immediately upon launch to reduce costs for the plan and reduce deductibles, copays,

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[20] Id.

[21] 42 C.F.R. § 423.120(b)(5)(iv).

[22] Department of Health & Human Services, Negative Change Requests (NCRs) no longer needed for §423.120(b)(5)(iv) Immediate Brand-Generic Substitutions, https://www.hhs.gov/guidance/sites/default/files/hhs-guidance-documents/expedited generic substitution submission guidance_0.pdf.

[23] Id.

or coinsurance for beneficiaries. I am not aware of any instance in which a generic manufacturer was required to wait a lengthy period of time, let alone more than a year, as Mylan suggests. To the contrary, I fully expect Mylan will succeed in making its generic product available to Medicare recipients very shortly upon launching its product, regardless of the time of year that launch occurs or the timing of when Mylan is able to begin discussions with Medicare plans.

IV. Mylan's access to commercial insurance formularies

30. Mylan also contends that, absent a stay, its generic product would not be covered by commercial insurance plans until at least "the January 2024 window, and more likely . . . July 2024."[24] According to Mylan, insurers "typically modify their plans only twice per year, in January and July," and "require manufacturers to submit pricing information 90-120 days in advance before the January and July modifications."[25]

31. Mylan is incorrect for several reasons. *First*, in my experience, PBM and health plan formulary committees managing commercial, or Medicare plans generally meet to review new drugs quarterly or more often as necessary. When a brand drug, such as Symbicort, already has formulary coverage, formulary committees routinely, almost automatically, add a therapeutically equivalent

[24] Motion at 20–21.
[25] Id.

generic, such as Mylan's Breyna, at any time. Adding a generic of an existing brand drug is not adding a new drug, but a new, therapeutically interchangeable version of the same drug. As discussed above, brand drugs regularly offer rebates to PBMs or other third parties in exchange for preferred formulary status. However, generic drug companies typically do not negotiate with PBMs, insurance companies, or other third-party payors. It is uncommon for a generic company to offer a rebate and Mylan has not represented that it intends to do so in this case.

32. Instead, generic manufacturers sell their products to wholesalers and drug sourcing companies who, in turn, sell to pharmacies. A therapeutically equivalent AB-rated generic, like Mylan's Breyna, may be automatically substituted for the brand drug by the pharmacist according to state pharmacy regulations. Unless the prescribing physician specifically writes on the prescription that a brand drug is "medically necessary," the pharmacist can substitute the generic for the brand drug. Indeed, in twelve states, the pharmacist is required to substitute the brand drug with a suitable generic.[26] For example, the Florida Board of Pharmacy statute states, "A pharmacist . . . shall, unless requested otherwise by the purchaser, substitute a less expensive, generically equivalent drug product . . . ."[27]

[26] Health Program (May 3, 2019), https://www.ncsl.org/portals/1/documents/health/Generic_Drug_Substitution_Laws_32193.pdf; *Medicaid Prescription Drug Laws and Strategies*, NSCL (Aug. 8, 2018), https://www.ncsl.org/research/health/medicaid-pharmaceutical-laws-and-policies.aspx;

[27] Florida Department of Health Board of Pharmacy Florida Statutes 465.0244 and

33. *Second*, even if Mylan were to negotiate with a third-party payor, it would be able to do so immediately upon launch. Although plans and PBMs typically follow a pre-determined bid cycle schedule, they will open up the formulary out of cycle in response to the entry of new products, including generics. For example, Aetna reports that its "formulary can change throughout the year."[28] In particular, Aetna states that it will update its formulary "throughout the year" to cover new generic drugs:

> Brand-name drugs lose patent protection and generic versions become available. When this happens, the generic drug will be covered in place of the brand-name drug.[29]

UnitedHealthCare similarly reports that, while regular formulary updates "typically occur 2–3 times per year," "changes that have a positive impact for [patients]—such as coverage for new medications or cost savings—may occur at any time."[30] Based on my personal experience working for Harvard Pilgrim Health Care, this type of change to add coverage for a new generic was a routine occurrence throughout the calendar year. We added new AB rated generic products to the commercial and

465.025 (revised 01/2020), at 23-24, .

[28] 2022 Aetna Pharmacy Drug Guide, Aetna Standard Plan, https://fm.formularynavigator.com/FBO/41/2022_Aetna_Standard_Plan_.pdf.

[29] Id.

[30] UnitedHealthCare, Your 2023 Prescription Drug List, https://www.uhc.com/content/dam/uhcdotcom/en/Pharmacy/PDFs/pharmacy-pdl-access-3t-jan-2023.pdf.

Medicare Part D formularies automatically to provide savings for our patients, employers, and the health plan.

34. In my experience pharmaceutical companies launch new drugs throughout the year. In the case of generic drugs, launches commonly occur upon conclusion of any Hatch-Waxman litigation or immediately upon the lifting of any injunction. I am not aware of any instance in which a drug company had to wait a lengthy period of time, let alone more than a year before gaining access to commercial insurance sales, as Mylan suggests will be the case here.

35. Mylan's Wixela Inhub product provides an instructive example. Wixela is a generic version of GlaxoSmithKline's Advair which, like Symbicort, is a respiratory treatment for asthma and COPD. Mylan received FDA approval in January of 2019[31] and launched on February 12, 2019.[32] Based on the arguments in Mylan's motion and supporting declarations, Wixela should have been excluded from commercial insurance plans until at least July 2019 and should not have been available to Medicare recipients until 2020.[33] But that did not happen. In the first

[31] *See, e.g.*, https://www.prnewswire.com/news-releases/mylan-announces-fda-approval-of-wixela-inhub-fluticasone-propionate-and-salmeterol-inhalation-powder-usp-first-generic-of-advair-diskus-fluticasone-propionate-and-salmeterol-inhalation-powder-300787783.html

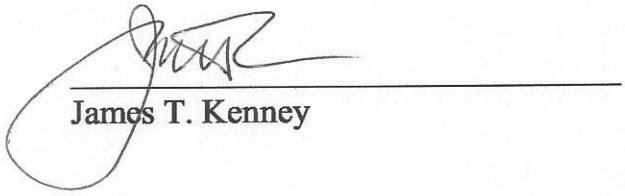
[32] *See, e.g.*, https://www.biopharmadive.com/news/mylan-advair-generic-gsk-strong-launch/550093/

[33] *See* Motion at 20–21.

two to three weeks after launch, Wixela captured about 24% of the Advair market.[34] In particular, within a few weeks of its launch Mylan "enjoy[ed] full parity and access for Wixela in eight out of 10 [Medicare Part D] plans."[35]

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

Date : January 4, 2023



James T. Kenney

[34] *See, e.g.*, https://www.biopharmadive.com/news/mylan-advair-generic-gsk-strong-launch/550093/; https://www.biopharmadive.com/news/generic-advair-hits-gsk-revenues-hard/553868/

[35] https://www.biopharmadive.com/news/mylan-advair-generic-gsk-strong-launch/550093/

APPENDIX A: CURRICULUM VITAE

JAMES T. KENNEY
President and Founder
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Resume and Curriculum Vitae – December 2022

WORK HISTORY

12/18- Present JTKENNEY, LLC Waltham, Massachusetts
Independent Managed Care Industry Consultant – Specializing in Pharmacy Benefit Design, Formulary Management, Pricing Strategy, Rebate Contracting, Outcomes-Based Contracting, Financial Modeling, Product Development, and Strategic Planning.

4/18 – 4/21 President-Elect, President, Immediate Past President AMCP
Alexandria, Virginia

4/19 – 3/20 ex-officio Chair of the Board of Managing Directors
Biologics and Biosimilars Collective Intelligence Consortium (BBCIC) Alexandria, Virginia

7/88-12/18 Harvard Pilgrim Health Care Wellesley, Massachusetts
Pharmacy Operations Manager/Manager, Specialty and Pharmacy Contracts, Pharmacy Operations Department
Responsibilities included the management of all pharmaceutical and specialty pharmacy contracts valued at over $100M for the commercial, Health Exchange and Medicare Part D lines of business. Pharmacy Operations representative and active member of the Harvard Pilgrim Health Care Corporate Pharmacy and Therapeutics Committee. Project work includes the development and negotiation of the retail pharmacy network program for Harvard Community Health Plan including the implementation of a Maximum Allowable Cost reimbursement schedule and the creation of a pharmaceutical rebate contracts program for Harvard Community Health Plan. Developed the Specialty Pharmacy Programs for general pharmaceuticals, hemophilia, and infertility products. Implemented and managed the rebate contracting for the Medicare Part D product offering in 2006. Provided consulting to the operating divisions of the plan regarding intervention programs, product selection, and network management. Serve on a number of management teams and task forces involved in pharmacy operations management including pharmacy drug benefit design, medical drug management formulary management, trend analysis, utilization management, and pharmacy incentive programs. Expert in the development and negotiation of outcomes-based pharmaceutical contracts.

9/87-6/88 Harvard Community Health Plan Brookline, Massachusetts
Assistant Administrator, Central Pharmacy Program

10/85-8/87 Harvard Community Health Plan Medford, Massachusetts
Chief of Pharmacy and Building Services Manager

5/80-9/85 Harvard Community Health Plan Cambridge, Massachusetts
Staff Pharmacist with promotion to Assistant Director of Pharmacy in April 1983

EDUCATION

5/85 Boston University Graduate School of Management
Masters Degree in Business Administration. Graduate with Honors. Concentration in Health Care.

12/79 Massachusetts College of Pharmacy
Bachelor of Science Degree. Dean's List, Rho Chi Honor Society.

5/77 Providence College
Bachelor of Science Degree. Major in Biology. Dean's List, Class Treasurer, Historian and Treasurer of Alpha Epsilon Delta Honor Society, Phi Sigma Tau, Student Congress.

PROFESSIONAL AFFILIATIONS

Academy of Managed Care Pharmacy (AMCP) Member: 7/1/89-present
AMCP Activities
- President April 2018 - April 2021
- Member, Board of Directors, 2014 - 2018
- Public Policy Committee – 3 years
- Schools of Pharmacy Relations Committee - 1 year
- Nominations Committee – 2 years
- Membership Committee – 1 year
- ACPE Review Committee – 1 year
- Awards Committee – 2 years
- Finance Committee – 3 years
- Student Pharmacist Committee – 1 year
- Organizational Affairs Committee – 1 year
- Format Executive Committee – 1 year

Grassroots Advocacy Committee - 4 years
Legislative and Regulatory Action Committee- 4 years and Committee Chair – 1 year
Preceptor, AMCP Managed Care Pharmacy Summer Internship Program 1997, 1998
Digital Therapeutics Advisory Group 3/22-present
AMCP Value Based Contracting Advisory Group – 1/20 - present
Business Development Task Force 2014
AMCP Nexus and Annual Meeting Conference Buddy Program – 10 years
Board Leadership Development Task Force 2022
Integrated Delivery Network (IDN) Work Group – 2 years
JMCP Editorial Advisory Board – 6 years
JMCP Peer Reviewer – 3 years
Past Presidents & Founders Advisory Council – 3 years
Virtual Legislative Days 2022

Other Affiliations
Biologics and Biosimilars Collective Intelligence Consortium (BBCIC) - Steering Committee 2015 -present
Biologics and Biosimilars Collective Intelligence Consortium (BBCIC) - Planning Board 2015 -present
American Pharmaceutical Association Member 4/1/83-present
Massachusetts Pharmacists Association – Government and Legislative Affairs Committee - 9 years
Massachusetts Society of Health-Systems Pharmacists Member 1/1/81 - present
Preceptor, Massachusetts College of Pharmacy and Allied Health Sciences and Northeastern University, Bouve College of Health Sciences 20 years (past)
ORGANIZATIONS
America's Health – Board Member 6 years (past)
American Health & Drug Benefits Editorial Board (start 2008) -14 years
First Report Managed Care Editorial Board 3 years (past)
Value Based Care in Rheumatology Editorial Board 10 years
Value Based Care in Multiple Myeloma Editorial Board 4 years (past)
PsychU Payer Section Advisor – 4 years

Awards

Massachusetts Pharmacist Association Nathan Goldberg Award Recipient: October 23, 2014
AMCP Distinguished Service Award 2022

CURRICULUM VITAE

Aimmune Therapeutics Advisory Council Meeting – December 19, 2022
Janssen Biotech, Inc. Bladder Cancer Payer Advisory Board – December 15, 2022
Regeneron Master Training Class Series on Managed Care Benefits – December 14, 2022
Sanofi Payer Multiple Sclerosis Advisory Panel – December 8, 2022
Novartis Payer Advisory Board – December 7, 2022
Albireo Payer Advisory Meeting Moderator – December 7, 2022
Alexion POA Meeting Presentation – December 7, 2022
Dupixent Atopic Payer Advisory Council – December 6, 2022
Nirsevimab Payer Advisory Council – December 5, 2022
UCB Advisory Group Meeting – November 21, 2022
Panelist, Advisory Board Meeting – Novel Products Shifting from Hospital to Outpatient – November 21,2022
Cowen Investor Webinar Virtual Panelist – November 18, 2022
Sanofi Advisory Group Meeting – November 17, 2022
DRG Live Account Manager Training – Fall Contracting Sessions – November 16, 2022
Moderator PAH Payer Advisory Board – November 14, 2022
Chair and Moderator Formulary Insights Committee Meeting – November 9, 2022
CAR-T Therapy in 1L Multiple Myeloma Advisory Board – November 3, 2022
UCB Advisory Board – October 26, 2022
ADHD Advisory Board – October 25, 2022
VBCDC Virtual Meeting – October 21, 2022
Takeda External Environment Panelist – October 20, 2022
Cystic Fibrosis Foundation Michigan Roundtable – October 20, 2022
Focus group on Non Cystic Fibrosis Bronchiectasis – October 19, 2022
Panelist, Advisory Board Meeting– Novel Products Shifting from Hospital to Outpatient – October 19, 2022
Moderator, Incyte Advisory Board – October 18, 2022
Narcolepsy Workshop Panelist – October 17, 2022
Moderator, Impact Education Satellite Symposium - Achieving Appropriate Access to High Quality Care for the Treatment of Primary Immunodeficiency – October 12, 2022
Novartis Advisory Board – October 11, 2022
PsychU Advisory Meeting – October 10, 2022
UCB Advisory Meeting – October 6, 2022
Glaucoma advisory Board – October 6, 2022
MS Payer advisory Council – October 6, 2022
Moderator, Cystic Fibrosis Foundation Texas Roundtable - October 8, 2022
LEO Pharma RWE in Atopic Dermatitis Advisory Board – October 4, 2022
Dupixent Atopic Payer Advisory Council – October 4, 2022
Apnimed Market Access Meeting – October 3, 2022

Health Plan Best Practices - Atopic Dermatitis Working Group Meeting – September 26, 2022
DIA Biosimilars conference Managed Care Panelist - Payers as the Lever to Biosimilars' Success – September 20, 2022
Moderator, Live Webcast: PayerTalkCE Presents: Applying Real-World Experience to Better Manage the Use of Oncology Biosimilars - September 19, 2022
AMP/DOAC Advisory Panel – September 19, 2022
CCSC Advisory Group Meeting – September 16, 2022
UCB Advisory Meeting – September 16, 2022
Syneos Health Glaucoma Workshop – September 13, 2022, September 15, 2022
APS Advisory Board – September 8, 2022
Novartis Payer Advisory Board – September 6, 2022
Migraine Market Advisory Panel – August 29, 2022
Dupixent Atopic Payer Advisory Council – August 26, 2022
CSL PMA Advisory Board – August 18, 2022
UCB Training Program Session 2 – August 17, 2022
Novartis Payer Advisory Board – August 16, 2022
Janssen Advisory Board – July 23, 2022
Dupixent Atopic Payer Advisory Council – July 15, 2022
MS Payer advisory Council – July 14, 2022
scPharmaceuticals Commercial Day Live Event Speaker – July 13, 2022
Moderator, Oncology Payer/PBM Virtual Advisory Board – June 28, 2022
UCB Training Program Session I – June 22, 2022
Syneos Health - Molluscum Ad Board – June 7, 2022
Moderator Value-Based Chronic Disease Collaborative: Virtual Meeting – June 3, 2022
Pfizer Gene Therapy Collaborative Series Meeting – June 2, 2022
Genentech Payer/Population-Based Decision Maker (PBDM) Alzheimer's Disease (AD) Virtual Advisory Council – June 1, 2022
CSL Global Evidence Generation Advisory Board- June 1, 2022
Zogenix Payer Focus Group Moderator – May 25, 2022
Dupixent Atopic Payer Advisory Council – May 20, 2022
Moderator, Live Webcast: The Management of Amyotrophic Lateral Sclerosis: A Guide to Enhance Outcomes – May 13, 2022, May 25, 2022
Payer Advisory Council Meeting with Aimmune Therapeutics – May 6, 2022
Market Access Training Program for Insulet - May 4, 2022
Sanofi Atopic Dermatitis Advisory Meeting Panelist– April 29, 2022
Moderator, Cystic Fibrosis Payer/Provider Workgroup - April 29, 2022
Contract Training Program for T.J. Paul – April 28,2022
AMCP Addressing Barriers to Value-based Care Advisory Group Meeting – April 28, 2022
Payor Innovations in Rare Disease Management Presentation for Horizon Pharmaceuticals – April 26, 2022
AJMC Training Panel - Effective HCEI Communication Across the Product Lifecycle: Best Practices for Payer Engagement – April 26, 2022

CCSC Advisory Group Meeting – April 18, 2022
DRG Virtual Account Manager Training – Spring Contracting Sessions - April 14, 2022
Nirsevimab Payer Advisory Council – April 14,2022
ManagedCareHemo.com Presents: A Rare Disease Strategy for the Evolving Hemophilia Treatment and Care Management Ecosystem: Hemophilia Treatment and Care Management Updates – How to Improve the Quality and Cost of Care = March 15, 2022
Biohaven Advisory Board Meeting – March 11, 2022
Lexicon Advisory Board Meeting – March 8, 2022
AMCP Digital Therapeutics Advisory Group Meeting – March 8, 2022
Obseva Advisory Board – March 2, 2022
Partner Therapeutics Training Program – March 2, 2022
NHF Value-based Insurance Presentation – March 1, 2023
Sanofi Atopic Dermatitis Advisory Meeting Panelist– February 23, 2022
UCB Payer Advisory Group – February 9, 2022
Incyte Advisory Board Moderator – February 2, 2022
Impact Education Hemophilia Webcast Series – January 26, 2022
Pharmacyclics AMCP Video Roundtable – January 21, 2022
Multiple Sclerosis Advisory Panel – January 20, 2022
UCB Payer Advisory Panel – January 20, 2022
AJMC Ophthalmology Peer Exchange – January 11, 2022
Mock P&T Program Participant – January 11, 2022
AMCP Value-Based Contracting Market Insights Meeting – December 15, 2021
Expert virtual advisory board for hypercholesterolemia and cardiovascular outcomes – December 14, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– December 13, 2021
Gene Therapy Collaborative Meeting – December 9, 2021
Lung Transplant Advisory Panel Moderator – December 6, 2021DOAC Advisory Panel – November 11, 2021
DRG Virtual Account Manager Training – November 10, 2021
CANEXTions Summit Presenter -November 9, 2021
Zogenix Payer Focus Group Moderator – November 3, 2021
Merck Cognition Advisory Board – November 3, 2021
Immune Deficiency Foundation Working Group – November 2,2021
Horizon Pharmaceuticals Training Program – November 1, 2021
Novartis Payer Advisory Board – October 29, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– October 26, 2021
UCB Account Training Meeting – October 26, 2021
Atrial Fibrillation Advisory Board – October 22, 2021
Nasopharyngeal Carcinoma Advisory Meeting – October 14, 2021
PsychU Section Advisor Meeting – October 11, 2021
DIA Biosimilars Session 6: Payer Market Dynamics – October 6,2021
UCB Account Training Meeting – October 5, 2021

Stem Cell Transplant Advisory Board – September 30, 2021
NHF Value-Based Chronic Disease Collaborative Co-Chair – September 24, 2021
Kite US Payer Advisory Board – September 21, 2021
DRG Expert Panel: Payer Insights into Cell & Gene Therapy - September 15, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– September 10, 2021
Horizon Pharmaceuticals Strategic Partnership with Health Plans Program – August 27, 2021
CCSC Virtual BDC Session – August 26, 2021
MTPA Advisory Board Moderator – August 25, 2021
Takeda CMV Presentation – August 15, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– July 30, 2021
United Therapeutics Advisory Board Moderator – July 29, 2021
MTPA Advisory Board Moderator – July 28, 2021
Bayer Account Manager Workshop – July 21, 2021
APS Advisory Board Meeting – July 13, 2021
Health Economics and Outcomes Research Perspectives Advisory Board – July 7, 2021
Pulmonary Arterial Hypertension: Optimizing Outcomes through Guideline-Directed and ValueBased Care 5 Part CE Series – June 30, 2021
Informa Contracts & Chargebacks Live Session – June 23, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– June 22, 2021
2021 BIO Digital: Live Q&A "Novel Reimbursement Approaches: Overcoming Barriers" – June 17, 2021
CKD Advisory Board Meeting – June 15, 2021
Novo Nordisk Advisory Board Meeting – June 14, 2021
CCSC Virtual Advisory Board Meeting – June 4, 2021
MTPA Radicava Insurance Process Webinar – May 27, 2021
HRA Pharma Advisory Board Moderator – May 19, 2021
DRG Virtual Account Manager Training – May 12, 2021
Growth Hormone Advisory Board – May 10, 2021
Sanofi Atopic Dermatitis Advisory Meeting Panelist– May 6, 2021
PTCE Asembia - Closing the Gap in Hemophilia Care: Therapeutic Advances in Hemophilia A and B Presenter– May 4, 2021
AMCP Addressing Barriers to Value-based Care Workgroup Meeting – April 28, 2021
NHF Value-Based Chronic Disease Collaborative Co-Chair – April 23, 2021
Astra Zeneca Respiratory Advisory Board Meeting – April 20, 2021

AMCP Virtual Symposium: Collaborating to Improve Care for Hemophilia: Managed Care Strategies for the Evolving Treatment Paradigm – April 16, 2021
AMCP COVID-19's Impact on Pharmaceutical Marketplace Trends Moderator – April 15, 2021
NACCME COVID-19 Managed Care CE Program – March 31,2021
CCSC 2021 Advisory Committee – March 29, 2020
Pfizer Account Manager Training – March 18, 2021
Mitsubishi Tanabe Pharma America Advisory Board Moderator – February 17, 2021

HRA Pharma Advisory Board Moderator – February 10, 2021
Insulet Advisory Board Moderator – February 3, 2021
Insulet Advisory Board Moderator – January 27, 2021
Omeros Advisory Board Meeting – January 26, 2021
AJMC Program – January 22, 2021
Regeneron Training Program – January 15, 2021
Boehringer Ingelheim Respiratory Advisory Board – December 18, 2020
AMCP Partnership Forum: Biosimilars-policy, practice, and post marketing surveillance to support treatment and coverage decisions. Participant – December 15-16, 2020.
Biohaven Strategy Workshop – December 14, 2020
Sanofi Atopic Dermatitis Advisory Meeting Panelist– December 14, 2020
NHF Value-Based Collaborative Meeting – December 4, 2020
Rheumatoid Arthritis Virtual Advisory Meeting Participant– December 3, 2020
Astra Zeneca Respiratory Advisory Board Meeting – November 19, 2020
Impact Education Hemophilia CE Program Moderator – November 18, 2020
NHF Value-Based Chronic Disease Collaborative Co-Chair – November 13, 2020
Astellas Account Training Program – November 9, 2020
Pharmacyclics Account Training Program – November 4, 2020
Novartis Payer Expert Panel Member – November 4, 2020
Astellas Account Training Program – November 2, 2020
Sickle Cell Disease Advisory Board – October 30, 2020
Impact Education ManagedCareHemo on-line Clinical Primer- October 29, 2020
Economic Modeling, Pricing and Contracting Advisory Board – October 26, 2020
United Therapeutics Advisory Board Moderator – October 26, 2020
Impact Education AMCP Managing the Cost of C. Difficile Infection Presenter – October 21, 2020
Impact Education AMCP Alzheimer's Disease CE Program Presenter – October 21, 2020
sC Pharma Advisory Board – October 15, 2020
United Therapeutics Advisory Board Moderator – October 13, 2020
Insmed Training Program Principal Faculty – October 8, 2020
MJH Video Program Moderator Value-Based Agreements in Rare Disease: Focus on Hereditary Amyloid Transthyretin Amyloidosis – September 30, 2020
Intellus Worldwide Summit Fireside Chat on Covid-19 Health Care Impact – September 10, 2020
NSCLC Focus Group Participant – September 14, 2020
Aurinia Advisory Board – September 9, 2020
Sanofi Atopic Dermatitis Advisory Meeting Panelist– August 17, 2020
NHF Gene Therapy Work Group Program – August 14, 2020
Takeda Gene Therapy Program – August 13, 2020
Mesoblast Training Program – August 12, 2020
AMCP Scipher Medicine Program – August 11, 2020
Mesoblast Advisory Board – August 1, 2020

DRG Genzyme Training Program Principal Faculty – July 23, 2020
AJMC Video RoundTable Moderator – July 21, 2020
CSSC Advisory Meeting – July 17, 2020
Athenex Advisory Board Meeting – July 16, 2020
AJMC Pfizer Virtual Roundtable – July 16, 2020
Anton Biosimilars Advisory Board – Participant – June 30, 2020
SKP Virtual CHF Panel Discussion Advisory Role– June 18, 2020
Impact Education On-line Presentation Skills Training Program Participant– June 17, 2020
Virtual Migraine Workshop Speaker – June 16 & 24, 2020
Sanofi/Genzyme Rheumatoid Arthritis Advisory Panel – June 15, 2020
Treating Medical Disorders with Botulinum Toxins: Comparing and Contrasting Available Agents Roundtable Faculty– June 12, 2020
Anton Health Virtual Advisory Meeting Member– June 11, 2020
Intellus Worldwide Virtual Summit Fireside Chat on the implications of COVID-19 on the Health Care System Speaker– June 9, 2020
Inherited Retinal Disease Gene Therapy Advisory Board – June 5, 2020
Rheumatoid Arthritis Virtual Advisory Meeting Participant– May 29, 2020
scPharmaceuticals Virtual Advisory Meeting Participant– May 22, 2020
Sanofi Atopic Dermatitis Advisory Meeting Panelist– May 20, 2020
Hyperkalemia Advisory Panel – May 15, 2020
Mesoblast Account Training – May 14, 2020
CCSC Advisory Meeting Member– May 12, 2020
Mesoblast Account Training – May 6, 2020
Mitochondrial Disease Workshop – May 1, 2020
AMCP eLearning Days 2019-2020 Pharmaceutical Marketplace Trends Moderator – April 20, 2020
Chronic Cough Advisory Panel – April 10, 2020
Otsuka PsychU Podcast – April 2, 2020
AMCP Webinar: Rutledge vs. PCMA – Impact on Managed Care Moderator – April 1, 2020
Gerson Lehrman Group Rare Disease Workshop Presentation Speaker– March 2020
Pfizer Webinar on Value-based contracts – March 25, 2020
Gene Therapy Payer Insights Program Presenter – March 19, 2020
MTPA Team Meeting Pull Through Topics Speaker– March 4, 2020
Cowen 40th Annual Health Care Conference: The Future of Biosimilars Panelist– March 2, 2020
AMCP/NASP Meeting – February 27, 2020
AJMC/Astra Zeneca Training Meeting Speaker – February 12, 2020
AMAG Market Access Meeting Speaker– February 7, 2020
Pfizer Gene Therapy Webinar Presentation – February 6, 2020
Joint Commission of Pharmacy Practitioners Meeting CEOs and Presidents Member (AMCP President) – February 5, 2020
Biocon Insulin Advisory Group Meeting – February 3, 2020
Abbvie Value-based Contract Presentation Presenter– January 31, 2020

Biohaven Advisory Board Panelist – January 30, 2020
Amgen Payer Insights Panel – Moderator and Speaker– January 29, 2020
Stifel Symposium – NASH, Neuromuscular and Lipids Panelist– January 22, 2020
GSK Formulary Management Panelist – January 17, 2020
NovoNordisk POA Meeting Presenter – January 16, 2020
Abbvie Value-based Contract Presentation Presenter– January 14, 2020
AJMC Formulary Panel Participant – January 7, 2020
Dermatology Webinar Executive Summary Presentation Speaker– January 6, 2020
AMCP Webinar: When Established Diseases Go Biologic Speaker– December 17, 2019
Contraceptive Market Access Advisory Board Meeting Member– December 4, 2019
Oncology Market Access Advisory Board Meeting – December 4, 2019
Account Management Training Innovative Contracting Boot Camp Co-Sponsor and Faculty – Moderator/Speaker – Types of Contracts and Key Terminology, Basic Contracting Workshop and Advanced Contracting Workshop November 19-20, 2019
Skill Building Workshop for Amgen Account Managers – Speaker – November 2019
Joint Commission of Pharmacy Practitioners Meeting CEOs and Presidents – Member (AMCP President) - November 21, 2019
DRG Account Management Training: Product Journey: Distribution to Dispensing, The Pharmacy Benefit, Pricing and Contracting, Mock P&T Committee. Faculty/Speaker November 5-6, 2019

Clinical Insights: Zilretta Offers New Way to Managed Pain and Delay Surgery in Patients with Knee Osteoarthritis – October 2019
Webinar Health Plan Perspectives on Value-based Contracts and ICER Speaker– October 24, 2019
Hereditary Angioedema Advisory Board Member– October 24, 2019
Biocryst Advisory Board Participant – October 24, 2019
Verrica Pharmaceuticals Webinar Moderator– October 22, 2019
Genzyme Summit Meeting Speaker– October 22, 2019
Verrica Web-Ex Advisory Meeting Moderator– October 21, 2019
Target PharmaSolutions Advisory Board Meeting Member– October 18, 2019
Impact Education Webinars: The Evolving Landscape in the Management & Treatment of Multiple Sclerosis – Moderator & Speaker - October 16, 2019, December 19, 2019
Janssen Pharmaceutica Advisory Board Member– October 15, 2019
Gilead Medical Science Liaison Meeting Managed Care Presentation Speaker– October 2, 2019
Regeneron POA Meeting Presenter – September 25, 2019
Janssen Advisory Board Member– September 23, 2019
Vertical Advisory Board Meeting Member– August 28, 2019
Joint Commission of Pharmacy Practitioners Meeting CEOs and Presidents – Member (AMCP President) - August 20, 2019
AMAG Market Access Meeting Speaker – August 2019

National Hemophilia Foundation Comprehensive Care Sustainability Collaborative (CCSC) meeting Member/Speaker - July 2019 (Member for 3 years)
CCSC Advisory Panel Meeting Member– July 28-30, 2019
Athenex Advisory Board Member– July 25, 2019
Biomarin Payer Summit Faculty – July 23, 2019
United Therapeutics Webinar Moderator– July 9, 2019
Biomarin Training Workshop Faculty/Speaker– July 2, 2019
Genentech Strategy Meeting Presentation Speaker– June 26, 2019
CCSC Copay Accumulator Adjustment Programs Live Webcast Speaker– June 20, 2019
Value-based Contracting Presentation to Entreé Health Speaker– June 2019
United Therapeutics Payer Advisory Board Moderator – May 31, 2019
Value-based Contracting Overview Presentation to Bristol-Myers Squibb Speaker – May 21, 2019
CCSC Copay Accumulator Live Webcast Speaker– May 20, 2019
AJMC Peer to Peer Video Exchange Speaker– May 2019
FDA Grand Rounds Participant – May 9, 2019
Joint Commission of Pharmacy Practitioners Meeting Member (AMCP President) – May 8, 2019
Account Management Training Innovative Contracting Boot Camp Co-Sponsor and Faculty – Moderator/Speaker – Types of Contracts and Key Terminology, Operationalizing Contracts, Basic Contracting Workshop and Advanced Contracting Workshop May 14-15, 2019
Anton Health Advisory Meeting Member– April 29, 2019
Astra Zeneca Medical Affairs Advisory Board Speaker– April 24, 2019
CCSC Advisor Web-Ex Member– April 22, 2019
State of Value-based Contracting Speaker – AMCP – April 2019
AJMC Diabetes Peer Exchange Video Series – Speaker April 15, 2019
Biogen Hemophilia Key Opinion Leader Payer Panel Panelist– April 2019
DRG Account Management Training Faculty/Speaker Follow the Dollar, The Pharmacy Benefit, Pricing and Contracting, Mock P&T Committee - April 9-10, 2019
Value-Based Arrangements Workshop – Sanofi National Training Meeting Speaker – April 2019
Biohaven Strategy Meeting Participant – April 9, 2019
Presentation: The Current State of Value-based Contracting – Speaker - AMCP – March 26, 2019
Cowen 39th Annual Health Care Conference– New Payor Models for Drug Reimbursement Panelist – March 12, 2019
AMCP Legislative Days Washington, DC – Participant - March 3-4, 2019
Medical Policies in Managed Care Settings – Regeneron – Speaker - March 2019
AMCP Webinar ICER: Payer Perspectives on the Use and Usage of ICER Reports – Speaker - February 28, 2019
Milliman Gene Therapy Advisory Meeting Participant– February 21, 2019
Otsuka Psych U Faculty Member – February 2019
ICON Breast Cancer Virtual Focus Group Participant – February 8, 2019
Managed Care Topics Presentation – Regeneron Speaker– February 2019
AJMC Alzheimer's Supplement Faculty Member – January 30, 2019

HIV Prep Advisory Board Meeting Member– January 25, 2019
Hemophilia Blinded Virtual Advisory Board Member January 17, 2019
Novartis Account Management Training Program Faculty/Speaker – January 9, 2019
American Society of Association Executives Exceptional Boards Two-Day Training Program Participant - January 2019
Crohn's & Colitis Foundation: Inflammatory Bowel Diseases: Collaborating for Improved Access and Quality of Care Advisory Meeting Member – December 17, 2018
CCSC Advisory Board Web-Ex Member – December 14, 2018
Hemophilia Virtual Advisory Board Meeting Member– December 5, 2018
Value-Based Contracts Presentation to Otsuka Account Team Speaker – November 15, 2018
Rheumatoid Arthritis Management Strategies: New Insights for Managed Care Symposium – Moderator & Speaker - October 22, 2018
Magellan Managed Care Advisory Board Member– October 2018
Payer Use of ICER Reports as Part of their Coverage Decisions: Opportunities for Pharmaceutical Organizations Panelist – AMCP October 24, 2018
Incorporating Cancer Immunotherapies into the Oncology Treatment Arsenal in Managed Care: Navigating the Complexities of Value Assessment & Cost Optimization in the Era of Immuno-Oncology Settings CE Symposium Co-Chair & Speaker- October 24, 2018
AMCP Corporate Training Program: Engaging Customers in Value-Based Care – Speaker October 23, 2018
Hemophilia Care Coordination and Current Treatment Options: The Latest Insights for Managed Care and Specialty Pharmacy Speaker – October 17, 2018
Target PharmaSolutions Payer Summit Member– October 12, 2018
Impact Education: Expert Interview on health plan strategies that enhance clinical, economic, and humanistic outcomes for members with multiple sclerosis Speaker - September 2018
Cowen Investor Call – A World without Rebates - Speaker – September 4, 2018
CCSC Advisory Board Meeting Panel Member – August 26-28, 2018
Managing Multiple Sclerosis: Current Treatment and Care Management Strategies for Managed Care Satellite Symposium Moderator and Speaker –August 21, 2018
Meeting with Health and Human Services Senior Advisor to the Secretary to Discuss Value-Based Contracting Legislative Issues Speaker– August 16, 2018
Hemophilia Care Coordination and Current Treatment Options: The Latest Insights for Managed Care and Specialty Pharmacy Speaker – July 11, 2018
CCSC Advisory Board Web-Ex 2018 Initiatives Member– June 28, 2018
Psoriatic Disease: Current Therapeutic Recommendations and Cost Management Considerations in Specialty Pharmacy Webcast Speaker – June 11, 2018
Joint Commission of Pharmacy Practitioners Meeting Member (AMCP President) – May 22, 2018
ArtSci Innovative Contracting Summit Moderator and Presenter; Legal and Regulatory Challenges May 17-18, 2018
United States Pharmacopeia Convention (USP) Advisory Meeting Member – May 11, 2018
Managed Market Resources Spring Advisory Group Meeting Speaker– April 26, 2018

AMCP Corporate Training Program Panelist – April 24, 2018
Managing Multiple Sclerosis: Current Treatment and Care Management Strategies for Managed Care. Moderator & Speaker - AMCP – April 23, 2018
ManagedCareHemo.com: Branched Patient Timeline – March 30, 2018
Target PharmaSolutions Spring Advisory Meeting Member– March 29, 2018
Cowen 39th Annual Healthcare Conference; New Payor Models for Drug Reimbursement Panelist – March 12, 2018
AMCP Legislative Days Participant– March 7&8, 2018
Hemophilia Mock P&T Advisory Meeting Speaker– February 24, 2018
HIV Live Webinar Q&A Session Faculty Speaker– February 14, 2018
Harvard Pilgrim Health Care Presentation on the Real Value in Pharmaceuticals, How Harvard Pilgrim is turning the tables – January 2018
Jeffries State of Drug Pricing Program Speaker. December 18, 2017
ACRO Pharmaceutical Services Payer/Managed Care Symposium Strategies for Specialty Medications Speaker– December 14, 2017
ArtSci Market Research Advisory Panel – Multiple Sclerosis Member – December 12, 2017
Account Director Development Residency Program Presentations: Workings of the P&T Committee and Mock P&T Committee Faculty/Speaker– December 5, 2017
Sage Therapeutics Advisory Meeting on Post-Partum Depression Member – December 1, 2017
NACCME Evaluating New Therapies in HIV CE Program Speaker– November 2017
Health Intelligence Partners Medication and Value-based Payments Advisory Meeting Panelist– November 2017
Morgan Stanley Investment Dinner Speaker – November 20, 2017
Focus Group on Real World Evidence of the Natural Progression of Alzheimer's Disease Speaker– November 17, 2017
SK Advisory Board Meeting Member– November 15, 2017
Versartis Advisory Board Member– November 14, 2017
CCSC Advisory Panel Meeting Member– November 5-7, 2017
The Outcome of it all - The Impact and Value of Outcomes-Based Contracts – Speaker October 2017
Managed Care and Integrated Delivery Systems… What's Next? – Speaker - AMCP – October 2017
Value-based Contracts Student Session – Speaker - AMCP- October 2017
Managing Alzheimer's Disease Now and in the Future: A Managed Care Guide – AMCP Meeting Speaker – October 31, 2017
Boston University Health and Sciences Conference 2017 Empowering Patients Embracing Health- Pharma's New Best Friend, Patients Panelist – October 27, 2017
AMCP The Outcome of it All – The Impact and Value of Outcomes-Based Contracts – Speaker – October 18, 2017
Magellan Advisory Board Meeting Member– October 17, 2017
AMCP Training Program: Value-Based Contracting Fundamentals, Hurdles and Opportunities – Speaker October 17, 2017

Target PharmaSolutions Advisory Panelist – October 13, 2017
CCSC Advisory Webinar Member– October 6, 2017
Managed Care Hemo.com Custom Learning Modules Project Team – Member - October 1, 2017
Bank of America/Merrill Lynch: Healthcare Supply Channel & HCIT One-on-One Conference Panelist– September 26, 2017
AMCP Legislative Days Participant – September 6, 2017
AMCP Advancing Value-based Contracting Partnership Forum Participant– June 20-21, 2017
Viscosupplement Virtual Steering Committee Member– May 25, 2017
Presentation on Prescription Drug Price Transparency – State of Maine Judiciary Committee Speaker – May 16, 2017
SM Health P&T Insight Meeting Participant– April 19, 2017
Specialty Pharmacy Review Board: Examining Emerging Therapies and Care Management Interventions for Alzheimer's Disease Moderator and Speaker – April 18, 2017
Approaches to Managed Care Contracting with Pharmaceutical Manufacturers – AMCP – Speaker October 2016 and March 29, 2017
Specialty Pharmacy Review Board: Examining Emerging Therapies and Care Management Interventions for Alzheimer's Disease; Moderator & Speaker -AMCP – March 29, 2017

TRK Infusions Advisory Group Meeting Participant– AMCP – March 29, 2017
Amgen Oncology Biosimilars Leadership Meeting Participant– AMCP -= March 28, 2017
Reality and Relevance Panel – Risk-based Future Speaker– AMCP – March 28, 2017
Encore: Approaches to Managed Care Contracting with Pharmaceutical Manufacturers – Speaker – AMCP - March 29, 2017

Specialty Pharmacy Review Board: Assessing the Value of Novel Therapies and Care Management Strategies for Multiple Sclerosis Moderator and Speaker – AMCP -March 27, 2017
March of Dimes 17P: Clinical, Public Health & Policy Approaches to Increased Access Speaker/Panelist– February 15, 2017
Massachusetts Health Council 19th Annual Public Health Symposium – Is the U.S. Ready for Value-based Pricing and Contracting for Drugs Speaker – January 18, 2017
Jeffries Investment Dinner Speaker – December 12, 2016
Viscosupplements Consensus Panelist– December 3, 2016
Morgan Stanley Investment Dinner Speaker – November 21, 2016
National Hemophilia Foundation CE Series: Hemophilia Clinical and Cost Optimization for Managed Care and Specialty Pharmacy November 17, 2016
CCSC Program Training and Education Webinar Participant– November 10, 2016
Impact Education Hemophilia Cost Optimization Strategies for Factor Replacement Therapy Webinar Speaker– October 27, 2016
The Outlook for Multiple Sclerosis: Targeted Therapy for Optimal Patient Outcomes Symposium Moderator & Speaker– October 5, 2016
Innovative Contracting Strategies for Specialty and Biotechnology Agents – AMCP – Speaker October 2016

Driving Improved Outcomes in Orphan Diseases: A study in Cystic Fibrosis Symposium Moderator & Speaker – October 4, 2016
Center for Pharmacy Practice Accreditation Managed Care Advisory Board – Participant - October 4, 2016
Approaches to Managed Care Contracting with Pharmaceutical Manufacturers – Speaker – AMCP - October 2016
The Managed Care Review Board™ — An Analysis of Current and Emerging Therapies and Benefit Design Considerations for Psoriasis and Psoriatic Arthritis Web Activity – August 18, 2016
How to Achieve Alignment and Consensus of Specialty Pharmacy Services Presentation National Hemophilia Foundation Meeting Speaker – July 2016
Hemophilia Treatment Center and Specialty Pharmacy Collaboration: Steps for Success Working Group- National Hemophilia Foundation Meeting Speaker– July 2016
National Hemophilia Foundation 68th Annual Meeting – How to Thrive in the New Health Care Ecosystem: Recommendations for Hemophilia Providers to Address Payer Challenges Speaker – July 23, 2016
Enhancing the Value of Managed Care and Specialty Pharmacy within the Hemophilia Comprehensive Care Model Workshops Speaker – July 21, 2016
AMCP Cystic Fibrosis Managed Care Webinar Participant– June 29, 2016
Connecticut Attorney General Health Care Public Policy Meeting Participant– June 2016
Boston Life Sciences Symposium Strategy Forum – Simon Kucher & Partners, Speaker – June 14, 2016
New Options in Contraceptive Care Roundtable Participant– AMCP – April 21, 2016
Managed Care Review Board: An Analysis of Current and Emerging Therapies and Benefit Design Considerations for Psoriasis and Psoriatic Arthritis Moderator and Speaker – April 20, 2016
AMCP Radio Recording Session Speaker– February 8, 2016
Morgan Stanley Investment Dinner Speaker– December 8, 2015
The Managed Care Review Board™ - An Analysis of the Latest Treatments, Economic Value, and Benefit Designs for Oral Anticoagulation Therapy, - October 29, 2015
Medical and Specialty Pharmacy Management Update on Primary Biliary Cirrhosis Symposium Speaker– October 28, 2015
AMCP Payer Insights Forum: Focus on Psoriasis Participant– October 27, 2015
Managed Care Trends Presentation to Alcon Laboratories Speaker– October 21, 2015
AMCP Approaches to Managed Care Contracting with Pharmaceutical Manufacturers Speaker – October 3, 2016
Market Access Training Program for Astellas Speaker– September 24, 2015
Market Access Meeting – Biogen Speaker – September 16, 2015
Janssen Pharmaceutica Financial Acumen Workshop Speaker– September 2015
Lilly US Sales Training MCO Finances Speaker– September 20, 2015
Impact Education Webinar Series: Collaborating to Improve Care for Multiple Myeloma: Managed Care Strategies for the Evolving Health Care Environment – Moderator and Speaker - June 23rd, 25th, 30th, 2015

Morgan Stanley Client Meetings and Investment Dinner Speaker– June 17, 2015
Intarcia Employer Advisory Meeting Participant– June 10, 2015
Issues Panel Presentation – ISPOR – Speaker -May 16, 2015
Association for Value-Based Cancer Care – Lung Tumor Topic Roundtable Participant– May 3, 2015
Expert Perspectives on Managing Myeloproliferative Neoplasms" Understanding Pathophysiology, Risk Assessment, and the Treatment of Polycythemia Vera Panelist – May 2, 2015
Hizentra vs. Hyqvia Comparative Analysis – Presenter - CSL Behring – May 2015
T1D Annual Meeting Panel Discussion Panelist– April 30, 2015
Biosimilar Consensus Conference Speaker– AMCP - April 2015
Keeping Up with Biosimilars in the U.S. – Update, Trends, and Pipeline Speaker AMCP – April 10, 2015
Cadre Resources Advisory Panelist – April 9, 2015
Collaborating to Improve Care for Multiple Myeloma, Managed Care Strategies for the Evolving Health Care Environment Speaker– April 8, 2015
Improving Multiple Myeloma Care via the Comprehensive Model: Attaining Provider Buy-in for Management Interventions and Specialty Pharmacy Services – April 2015
Collaborating to Improve Care for Multiple Myeloma, Managed Care Strategies for the Evolving Health Care Environment Speaker– April 8, 2015
Improving Multiple Myeloma Care via the Comprehensive Model: Attaining Provider Buy-in for Management Interventions and Specialty Pharmacy Services –Speaker - April 2015
Collaborative Payer and Provider Working Group to Discuss Strategies for Improving Outcomes in Chronic Diseases (i.e. Diabetes) Speaker– March 28, 2015
Comprehensive Care Sustainability Collaborative Panel Member – March 2015
Astra Zeneca Market Access Patient Strategies Finance Acumen Workshop – Speaker - March 26, 2015
MIT Sloan Bioinnovations 2015 The Future of Specialty Drug Pricing & Reimbursement Panelist - February 20, 2015
Multiple Sclerosis Association of America Health Care Advisory Council Meeting Member– January 29, 2015
COE Perspectives Faculty: Latest Treatment Advances for Individualized Care of CRC Speaker – January 2015
Massachusetts Health Council 17th Annual Public Health Symposium – Hepatitis C Disease and Therapeutic Update Speaker– January 2015
P&T Insight Meeting on secukinumab Participant– December 16, 2014
Updates on Non-Small Cell Lung Cancer Treatments – A Perspectives Review of ASCO/ESMO Abstracts Speaker– December 2014
ACRO Pharmacy Annual Symposium Panelist – December 4, 2014
Morgan Stanley Investment Dinner Speaker– December 1, 2014
Satellite Symposium: The Challenges of Hepatitis C Management – Moderator & Speaker - October 9, 2014

Multiple Sclerosis Association of America Health Care Advisory Council Meeting Member– October 28, 2014
Control vs. Cure Multiple Myeloma Webcast Speaker– May 27, 2014
AMCP HCV CER PCORI Research Roundtable Panelist – May 21, 2014
ASH Hematology Conference Reporter Series – Keeping Pace with Payer Implementation of the Latest Clinical Updates in Hematological Malignancies for Hematologists, Oncologists and Managed Care Professionals Speaker- May 3, 2014
Biogen Idec Training Panelist – May 1, 2014
ASH Conference Recorder Series Speaker– April 24, 2014
Emron Psoriasis Market Research Panelist – April 2, 2014
CDMI Market Research Panelist - April 2, 2014/April 3, 2014
Oncology Focus Group – CB Partners Participant– March 20, 2014
Morgan Stanley Investment Professionals Dinner – December 2013
ASH Conference Reporter Roundtable Discussion – November 11, 2013
AMCP Nexus Meeting: Fundamentals of Managed Care Pharmacy Certificate Program – Part 2 Speaker, October 15, 2013
Pinsonault Managed Markets Summit: Healthcare Reform – The Great Debate Panelist, September 18, 2013; All You Need to Know about ACOs Presenter – September 14, 2013

Impact Education: Managed Care Review Board Webinars – Analysis of Current and Emerging Therapies for Insomnia – September 11 & 24, 2013
Webcast – Current Therapies for the treatment of insomnia – August 2013
Formulary Review of Incretin-Based Therapies – NAACME June 2013
Pharmacy Benefit Management, The Health Plan Perspective – Presentation to Upsher Smith June 2013
AVBCC Conference: Access to Drugs, Shortages and Biosimilars Presenter – May 5, 2013
Payer Approach to Pharmacy Management Advisory Board – May 2013
Managed Market Resources Spring Advisory Group Meeting – April 4, 2013
Moderator and Speaker - Impact Education: Applying a Congruent Oncology Pharmacy Strategy – From Guidelines to Specialty Pharmacy: Steps for Success in Multiple Myeloma – AMCP – April 3, 2013
CDMI Market Research Panelist - April 2013
Biologic Therapies for Chronic Disease: Factors Influencing Treatment Decisions CE Program– Speaker - April 4, 2013
Value Based Cancer Care Conference- Access to Drugs - Shortages, Biosimilars - May 2013
Tough Topic Symposium Panelist – February 2013
What Will Pharmacy Benefits Look Like Under the New State Health Plans, Managed Markets Summit Panelist – February 2013
Aegerion Advisory Board – December 2012
Webcast – Optimizing Outcomes in patients on Growth Hormone November 2012
Specialty Pharmacy Panel Discussion: Specialty Challenges in an Evolving Health Care Marketplace – Managed Markets Summit Meeting - September 20, 2012

AJMC Supplement: Emerging Type 2 Diabetes Treatment Strategies: Practical Solutions for a Complex and Swiftly Changing Environment – July 2012
MediMedia Biologic Therapies Focus Group – July 2012
Ascend Pharmaceuticals Presentation on Managed Care Pharmacy – June 2012
COPD Burden of Illness – Draft FCB May 2012
Moderator and Speaker Impact Education: Emerging Type 2 Diabetes Therapies: Managing the Evolving Complexity of Pharmacologic Treatments: CER, PE Data Analysis, and Other Decision Support Tools – AMCP – April 2012
COE, LLC Myelofibrosis and Multiple Myeloma Strategies for Effective Decision Making – AMCP - April 20, 2012
Watson Play Big National Meeting – March 2012
Managed Market Resources Presentation on Managed Care Commercial Formulary Management – February 2012
Leerink Swann Global Healthcare Conference – Rheumatology Poised to Evolve Panel, February 15, 2012
Leerink Swann Global Healthcare Conference – Hepatitis C Transformation in the Making Panel and Lipids: There is Life Beyond Lipitor Panel, February 16, 2012

Healthcare Businesswomen's Association Boston Chapter Meeting: Crossing Boundaries in Drug Development: Perspectives on Drug Pricing and Reimbursement Panelist – October 12, 2011
Amarin Pharmaceuticals Advisory Board – October 2011
Opioid Dependence Focus Group – Pharmastrat – July 2011
Multiple Sclerosis: Evaluating New and Emerging Therapies to Improve Patient Outcomes Through the Continuum of Care – June 18, 2011
Jeffries Investment Luncheon Speaker – June 2011
Wharton/Windhover Managed Care Training Faculty – Pharmacy Benefit Management Presentation – May 2011
Armada Specialty Pharmacy Summit: Managed Care Leadership Panel May 2011
AVBCC Commentary on Endpoints in Clinical Trials of Multiple Myeloma Treatments – April 21, 2011
Pinsonault Managed Markets Summit: Specialty Pharmacy Management Under Health Care Reform Presenter – April 14, 2011
Pharmaderm Advisory Board – April 2011
The Evolving Role of Outcomes and Endpoints in Evaluating Therapy for Hematological Malignancies: Value-Driven Benefit Design and Utilization Management Strategies Speaker – AMCP April 28, 2011
Informed Decision Making Presentation – AMCP April 2011
Managed Health Care Presentation – Upsher Smith – March 2011
Salix Pharmaceutical Inc. – Advisory Panel – January 25, 2011

Roundtable – Optimizing Outcomes in the Management of Alzheimer's Disease, AJMC – November 2010
Impact Education Webinar Speaker - Optimizing Outcomes for Patients with Growth Hormone Deficiency and Other Growth Disorders in Managed Care – November 2010
Moderated and presented at AMCP Satellite Continuing Education programs on Incretin-Based Therapies, Multiple Myeloma, Informed Decision Making in Managed Care - November 2010
Commonwealth of Massachusetts Citizen's Legislative Seminar – 2 day program Participant – October 2010
AMCP CE Programs: Is it Possible to Significantly Limit or Halt the Damage of Rheumatoid Arthritis (RA)? The Benefits of Anti-TNF Therapy in Managed Care Presentation – October 14, 2010
Benefits of Treating to RA Remission: Clinical and Financial Implications for Managed Care – October 2010
Health Care Overview/Medical vs. Pharmacy Sanofi – October 2010
Sanofi Aventis Oncology Workshop – September 9, 2010
AJMC Commentary on Rheumatoid Arthritis – September 2010
Sandoz Account Training Program – July 2010
Armada Specialty Pharmacy Summit Managed Care Leadership Panel May 2010
Formulary Factor Meeting- TPG – May 2010
Pancreatic Enzymes Advisory Board – AMCP – April 2010
Innovative Contracting Strategies for Specialty and Biotechnology Agents AMCP Annual Meeting Speaker – April 8, 2010
Pinsonault Managed Markets Summit: Performance-Based Pharmaceutical Contracts: A Health Plan Perspective Presenter – February 23, 2010

Brooks Group Advisory Panel on Blood Glucose Monitoring Products – February 2010
Training Program for Bausch & Lomb Account Team – December 2009
Patient Engagement from Adherence to Health and Wellness – American Health and Drug Benefits – October 2009
Pinsonault Managed Care Account Management Training Program Speaker on The Pharmacy Benefit, Pricing and Contracting, Mock P&T Committee and Understanding Product Reimbursement Costs.- April 28-29, 2009.
Ocular Allergy Advisory Board – AMCP – April 2009
State Legislative Update – AMCP April 2009
Abbott Total Account Call Training Program March/April 2009
Pinsonault Managed Markets Summit: Biosimilar Products: A Review of Clinical and Legislative Issues Presenter – March 3, 2009.

Account Management Challenges in Managed Care and Understanding Managed Medicaid Pharmacy Presentation to Sanofi – March 2009
The Pharmacy Benefit United Therapeutics – February 2009
Pharmastrat Mock P&T Meeting – December 2008
Pharmaceutical Contracting in Managed Health Care – CDMI Meeting September 2008

Economic Considerations in COPD Treatment – Medical Interface Supplement – September 2008
Ustekinumab Focus Group – Janssen Pharmaceutica – July 2008
EMD Serono Injectables Digest Editorial Board Member – March 2008

Account Management Training Programs Principal Faculty twice per year on managed care for over 2000 pharmaceutical industry personnel for Pinsonault and DRG Associates (April 2003November 2021)

Speaker at Pinsonault Managed Markets Summit Programs on topics including The Impact of Health Care Reform on Managed Care Contracting, Biosimilar Products – A review of clinical and legislative issues, Update on Biosimilars: Challenges and Opportunities, Health Insurance Exchanges, Pharmaceutical Contracting, Understanding the 340b Pricing Program, Specialty Pharmaceuticals – Managed Care Trends, Contracting for Outcomes: The Shift from Prospects to Results, All You Need to Know About ACO's and Then Some, Performance-Based Pharmaceutical Contracts: A Health Plan Perspective, Federal Health Care Reform, Massachusetts Health Care Reform, State/Federal Legislative Update, Management Trends in Specialty Pharmacy, Biologics, Specialty Pharmacy, and the Role in Care Management, Universal Health Care, Specialty Pharmacy Management Under Health Care Reform, Medication Compliance and Adherence, Oncology Management, Health Insurance Exchanges, and Pharmacoeconomic programs and principles (2003-2014)

Wyeth Laboratories Negotiation Skills Workshop for Account Managers 2005

Encouraging the Appropriate Utilization of Low-Dose Bisoprolol/Hydrochlorothiazide Combination Therapy in Managed Care Environments Roundtable July 30.1997

Publications

Guided therapy selection in rheumatoid arthritis using a molecular signature response classifier: an assessment of budget impact and clinical utility. Arnell, C. et. al. Journal of Managed Care and Specialty Pharmacy. October 2021.

An Analysis of member retention patterns for adult rare disease cohorts to support evaluating multiyear payment arrangements for novel therapies, Jackson E. et. al. Journal of Managed Care and Specialty Pharmacy. 2021 Jun; 27(6) 753-759.

Kenney JT. Navigating the Complex World of Diagnostic Tests and Their Role in Clinical Decision Making. Am Health Drug Benefits. 2020;13(3):118-119.

Effects of a 3-Tier Pharmacy Benefit Design on the Prescription Purchasing Behavior of Individuals with Chronic Disease KAVITA V. NAIR, PhD; PAMELA WOLFE, MS; ROBERT J. VALUCK, PhD; MARIANNE M. MCCOLLUM, PhD; JULIE M. GANTHER, PhD; and SONYA J. LEWIS,
RPh Commentary: The Tiered Pharmacy Benefit: Challenges in Today's Health Care Market. James T. Kenney, RPh, MBA
JMCP's 25th Anniversary Series Volume 26, Number 5, May 2020

Kenney JT. Utilization Challenges of Drugs for Multiple Sclerosis in a Medicaid Population. Am Health Drug Benefits. 2020;13(2):83-84.

A Critical Opportunity to Adopt Guideline-Directed, Standard of Care for Patients with Type 2 Diabetes and Established Cardiovascular Disease, Conversation with an Expert: Boehringer Ingelheim - July 2020

Pharmacoepidemiology & Drug Safety: Capture of biologic and biosimilar dispensings in a consortium of U.S.-based claims databases: Utilization of national drug codes and Healthcare Common Procedure Coding System modifiers in medical claims. Zhang, J et.al, December 4, 2019.

Digital Therapeutics: Advances in Healthcare Innovation, Magellan RX Report Spring 2019: 11-15.

AJMC Supplement: Exploring Therapeutic Targets of the Beta Amyloid Pathway to Slow the Progression of Alzheimer's Disease Co-Author– May 2019
Grifols Topics in Managed Care KOL Program– Prolastin-C Author - May 1, 2019
AMCP Abstract: The Emerging Role of Pimavanserin in the Management of Parkinson's Disease Psychosis, Kenney, JT et. al, June 2017

The Identification and Management of Parkinson's Disease Psychosis Consensus Document Coauthor– November 22, 2016
Hemophilia Management: Opportunities for Payor, Provider, and Home Care Coordination – Magellan RX Report Summer 2015(23-27)
JMCP, June 2018: Viscosupplementation for Osteoarthritis of the Knee: A Key Opinion Leader Panel Discussion Volume 24 Issue (6-a Suppl)

AMCP Partnership Forum: Advancing Value-Based Contracting Vol. 23 Issue (11) J Manag Care Spec Pharm, 2017 Nov;23(11):1096-1102.
https://doi.org/10.18553/jmcp.2017.17342

JMCP, October 2016: Primary Biliary Cholangitis: Medical and Specialty Pharmacy Management Update
Christopher L. Bowlus, MD; James T. Kenney, RPh, MBA; Gary Rice, RPh, MS, MBA, CSP; and Robert Navarro, PharmD

Hemophilia Management: Opportunities for Payor, Provider, and Home Care Coordination – Magellan RX Report Summer 2015 The Oncology Pharmacist:
New End Points Create Novel Challenges for Health Plans in Oncology Drug Management Web Exclusives in Drug Therapies – September 2012

AJMC Supplement: Emerging Type 2 Diabetes Treatment Strategies: Practical Solutions for a Complex and Swiftly Changing Environment – July 2012

AVBCC Commentary on Endpoints in Clinical Trials of Multiple Myeloma Treatments – April 21, 2011
American Journal of Managed Care: Treat to Target: Rheumatoid Arthritis Management in a Value-Based Healthcare System [CME/CPE] – Published on: November 19, 2010. The Managed Care Perspective

Perspectives and other articles published in American Health & Drug Benefits

Gray Cory, Kenney JT. Outcomes-Based Contracting for Disease-Modifying Therapies in Multiple Sclerosis: Necessary Conditions for Paradigm Adoption. Am Health Drug Benefits. 2019;12(8):390-398

Kenney JT. The Challenges in Budgeting Potential Savings with the Launch of Generic Drugs. Am Health Drug Benefits. 2019;12(7):341-342.

Kenney JT. Enhanced understanding and management of rare diseases can reduce costs, improve clinical outcomes. Am Health Drug Benefits. 2019;12(3):134-135.

Kenney JT. Accurate diagnosis of chronic diseases can reduce costs and medical resource utilization. Am Health Drug Benefits. 2018;11(3):144-145.

Kenney JT. Oklahoma benefits program setting an example: a cost-effective bundled payments option for state employees. Am Health Drug Benefits. 2017;10(9):447.

Kenney JT. More data analysis is needed to improve outcomes, lower costs, and maximize appropriate resource use. Am Health Drug Benefits. 2017;10(7):374.

Kenney JT. Improved diagnosis and treatment of narcolepsy may also help to reduce the associated costs. Am Health Drug Benefits. 2017;10(5):241.

Kenney JT Jr. Patients' choice for site of care motivated by more than cost alone. Am Health Drug Benefits. 2017;10(2):70-71.

Kenney JT. Health plans must monitor the oncology pipeline to apply appropriate coverage criteria, maintain treatment value. Am Health Drug Benefits. 2017;10(special issue):34.

Kenney JT Jr. A systematic Approach to Medication Therapy Management in Elderly Patients with Chronic Diseases Can Improve Outcomes. Am Health Drug Benefits. 2016;9(5):268.

Kenney JT Jr. Reducing Adverse Events and Healthcare Resource Waste by Careful Selection of the Best Drug Therapy. Am Health Drug Benefits. 2016;9(4):213.

Kenney JT Jr. The challenge of balancing access to and paying for new, high-cost cancer therapies. Am Health Drug Benefits. 2016;9(special issue):64.

Kenney JT. Value-based care must be linked to improved clinical outcomes. Am Health Drug Benefits. 2016;9(special issue):22.

Kenney JT Jr. Impact of Chemotherapy-Induced Nausea and Vomiting Treatment on Patient Outcomes and Resource Utilization. Am Health Drug Benefits. 2015;8(5): 281-282.

Kenney JT Jr. The rationale for comparing the costs of competing treatment options in oncology. Am Health Drug Benefits. 2015;8(4):214-215.

Kenney JT. Better compliance with clinical guidelines for venous thromboembolism can improve patient outcomes, reduce costs. Am Health Drug Benefits. 2014;7(8):450-451.

Kenney JT Jr. The hidden market of counterfeit drugs a concern for all stakeholders. Am Health Drug Benefits. 2014;7(4):224.

Kenney JT Jr. Payers' management of oncology drugs: opportunities and challenges. Am Health Drug Benefits. 2014;7(3):123-124.

Kenney JT Jr. Increasing importance of oncology drug management for payers. Am Health Drug Benefits. 2013;6(5):225-226.

Kenney JT Jr. Balancing cost, efficacy, safety, and genetic data in the selection of best therapies for multiple myeloma. Am Health Drug Benefits. 2013;6(2 suppl 3):S52-S53.

Kenney JT Jr. Managing medical benefit drugs under specialty pharmacy: the next critical challenge for managed care. Am Health Drug Benefits. 2012;5(5):289.

Kenney JT Jr. The burden of myelofibrosis and multiple myeloma: a candid dialogue. Am Health Drug Benefits. 2012;5(5 suppl 3):S44-S45.

Kenney JT Jr. The challenges of pulmonary arterial hypertension management: potential benefits of removing monthly testing. Am Health Drug Benefits. 2012;5(2):101.

Kenney JT Jr. Payer Perspective ASH 2011 Update: Multiple Myeloma Treatment Trends and Strategies for Value-Based Care: payer perspective. Am Health Drug Benefits. 2012;5(2 suppl 1):S10-S12.

Kenney JT. Prevention efforts before disease strikes the key to a healthy population of young adults. Am Health Drug Benefits. 2011;4(5):287-288.

Kenney JT. Advances in the management of multiple myeloma: implications for payers. Am Health Drug Benefits. 2011;4(2 suppl 4):S59-S60.

Kenney JT. Balancing cost and efficacy in non-Hodgkin lymphoma: a pharmacist's perspective. Am Health Drug Benefits. 2011;4(1 suppl 2):S34-S35.

Kenney JT Jr. Patient engagement: from medication adherence to health and wellness. Am Health Drug Benefits. 2010;3(2 suppl 6):S141-S145.

Kenney J. Cost impact of new breast cancer therapies: aligning incentives to achieve patient centered, valued-based oncology care. Am Health Drug Benefits. 2010;3(1 suppl 3):S35.

Kenney JT Jr. Economic considerations in chronic obstructive pulmonary disease treatment. Am Health Drug Benefits. 2008;1(8 suppl):18-22.

Kenney JT Jr. Maximizing Savings, Efficiency, and Quality when Contracting with a PBM. Am Health Drug Benefits. 2008;1(5): 19.

CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of Fed. R. App. P. 27(d)(2)(C). This brief contains 5,188 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b)(2).

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6). This brief has been prepared in a proportionally-spaced typeface using Microsoft Word in fourteen-point Times New Roman style.

/s/ David Berl
JANUARY 5, 2023 DAVID BERL

Attorney for Plaintiffs-Appellees

CERTIFICATE OF CONFIDENTIAL MATERIAL

The foregoing document contains eight unique words (including numbers) marked confidential for the first time in this filing. This number does not exceed the maximum of 15 words permitted by Fed. Cir. R. 25.1(d)(1)(A).

/s/ David Berl
JANUARY 5, 2023 DAVID BERL

CERTIFICATE OF SERVICE

I certify that today, January 5, 2023, I electronically filed the foregoing with the Clerk of the Court for the U.S. Court of Appeals for the Federal Circuit using the appellate CM/ECF system. Counsel of record for all parties will be served by electronic mail.

/s/ David Berl

JANUARY 5, 2023 DAVID BERL

Attorney for Plaintiffs-Appellees